

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

WITH SUPPLEMENT. { PRICE SIXPENCE
BY POST. £1 4s. PER ANNUM

Can. 1224 the following	200 Leadhills.	20 Roman Gravel.
120 Almada	50	100 Russell United.
25 Bristol	5 Lombardy Hall, offer	100 South Warren.
125 Colombian Hydraulic	5 wanted.	100 Tankerville.
60 Corporation of South	45 Mounts Bay.	20 United Mexican.
Australian Copper.	20 Montana.	5 Wisl. Oreb.
100 Orientales.	130 Nouveau Monde.	35 Western Andes
15 Colorado.	30 New Trumpet Cannel.	40 West Qallao.
40 Devon Friendship.	100 Port Phillip.	
	40 Prince of Wales.	

VICTORIA GOLD (Venezuela).—I strongly recommend the immediate purchase of these shares for an important rise; also **CORPORATION OF SO**

AUSTRALIAN COPPER.

PURCHASERS FOR FORWARD DELIVERY AT SPECIAL PRICES

RETURN OF DEPOSIT OF 10 PER CENT.

BUYER of any part of 100 Victoria Gold (Venezuela), Tolima A and B, Cambaro, East Rose, Home Mines Trust, Old Shepherd, and Mounts Bay

SHARES: ALLIANCE BANK

MINING EXTRAORDINARY.

The MINES are so rich that the OWNERS have AGREED the WHOLE of the DEBENTURE CAPITAL shall be REPAYED, with INTEREST, before they can MAKE any PROFIT.

BONA FIDE REASONS FOR COMPANY.

This Company is formed to erect machinery to render marketable ores exposed to view. The OWNERS GIVE a MORTGAGE on the property, as well as an INTEREST in the FUTURE PROFITS.

FOUR THOUSAND POUNDS have been placed with the Company's Bankers to PAY the first year's INTEREST.

North Mexican Silver Mining Company, Limited,

Subscriptions are invited for 3000 SEVEN PER CENT. FIRST MORTGAGE DEBENTURES of £20 each. With every DEBENTURE FULLY PAID UP SHARES for £20, FREE FROM all LIABILITY, will be GIVEN as a BONUS.

The Debentures MUST be PAID off BEFORE any DIVIDENDS can be paid on the Shares. Each subscriber gets his capital, with interest, returned by the payment of the Debenture, and a Share in the future profits of the Mines, through the FULLY PAID SHARES PRESENTED GRATIS. Mr. T. B. Provis, M.I.C.E., the engineer sent out to verify the vendors' statements, reported there would be a MINIMUM INCOME of £75,000 (to INCREASE at an early date to £105,000). This sum will pay back the principle the second year, and a DIVIDEND of over THIRTY PER CENT. per annum to the Debenture holders on their share capital the third year.

Deposits:—£2 on Application, £5 on Allotment.

TRUSTEES FOR DEBENTURE HOLDERS.

The Hon. FREDK. S. A. HANBURY TRACY, M.P.
F. W. LOWTHER, Esq., Carlton Club.
WILLIAM PALMER, Esq. (Oastler, Palmer, and Co.), Bermondsey.

DIRECTORS.

Sir J. J. JENKINS, M.P. (Director, Swansea Bank), CHAIRMAN.
JOHN ALLEN, Esq. (Messrs. Elves and Allen, Agents in England for Wells, Fargo, and Co.), Cannon Street, E.C.
S. B. COXON, Esq., M.I.C.E., F.G.S., Victoria Chambers, Westminster.
The Hon. H. ROPER-CURZON (late Assistant Inspector, Exchequer and Audit Department).
HENRY AYSHFORD SANFORD, Esq., Chester Street, Grosvenor Place.

BANKERS—Messrs. COCKS, BIDDLEPH, and CO., 45, Charing Cross.

SECRETARY (pro tem.)—Mr. F. W. PORTER.

OFFICES—20, ST. HELEN'S PLACE, E.C.

This capital is raised not to discover whether ores exist, but to erect machinery to reduce them.

The company owns seven mines at Cusiuhirachic, Chihuahua, extending two miles in length, with shafts sunk, levels opened, and ore ready for immediate extraction.

Until the opening of the Mexican Railway just completed, this company's mines were practically inaccessible.

All supplies had to be taken 800 miles by mules.

The registered production of this district under these difficulties has amounted to £8,500,000 sterling.

Mr. Thomas H. Provis, M.I.C.E., engineer and superintendent of the Potosi Gold Mining Company (Limited), who was specially sent out to examine the mines, reported the minerals to be practically inexhaustible, and the minimum income would be £75,000, to increase to £105,000, and the amount would depend entirely upon the stamping power. He further reported that the average assays of the poorer ores taken from the shafts, and along the sides of the levels from five of the company's mines, yielded respectively \$49, \$51, \$28, \$65, and \$85 to the ton; and he added, "All these samples were taken from portions of the veins that were left by the Spaniards, and it will be seen that it is not a fair average of the richness of the veins, as it is hardly likely the Spaniards would leave the best of the stone;" and he further added, "I have not included any of the richer samples, some of which yielded over \$200 to the ton. If picked stones had been taken very different results from the above would have been given;" and he concluded by observing, "Every assurance of success from the investment is guaranteed by the uniformity in the yield of silver per ton, while the great length and width of the fissures are sufficient to ensure a regular output of mineral, and I do not hesitate to say that during the 15 years of my experience as a mining engineer in the West of England, Brazil, Colorado, the United

States, and South America, taking it as a whole, this is the best unwrought silver mining property that has been my good fortune to see, and I only add, in conclusion, that I see nothing to prevent this property from paying to the shareholders profits on a much larger scale than I have ventured to put forth in this report."

The "Encyclopaedia Britannica" states—"In recent times one-half of the silver produced in the wide world has been supplied by Mexico."

The highest class American scientific journal, speaking of this district, said, in the height of prosperity of the Comstock lode—"What account of the Comstock lode by this time should we have, were its mines, as in the case of those of Northern Mexico during the period of their activity, without other than the rudest iron or steel implements, without powder, except in rare cases of foreign stunted supply, with only the adobe houses for smelting, and the little cazo for amalgamation."

The author of the above visited the mines of North Mexico in 1869 for scientific purposes, and published the following respecting this company's mines:—"The mineral lodes of Cusiuhirachic have fully proved their claim to rank with the best in Mexico, on the ground both of their quantity and quality."

Sir Henry G. Ward, the British Minister, made a special journey to North Mexico to collect information from official sources. He wrote "that this district contained an infinity of mines hitherto but little known, but holding out, wherever they have been tried, a promise of riches superior to anything that Mexico has yet produced," and yet Mexico has produced seven hundred million sterling in silver.

Only two trips a year could be made to the City of Mexico for supplies, and consequently, in addition to usurious prices for the necessities for mining, the pure silver on the spot only fetched half price.

The opening of the Mexican Central Railway in May next will remove all these obstacles, and enormous fortunes will be realised by those early in the field.

Hence the remarkable prospects of this company, which are best shown by the recent rise in the United Mexican shares from 1½ to 10, or over 600 per cent.

PROTECTION TO INVESTORS.

According to Her Majesty's speech diplomatic relations with Mexico are to be resumed, and a report printed by order of Parliament referred "to the tranquillity of the country."

The directors have stipulated that if at the end of three months working they do not see the way to successful results, the vendor will take back the property and repay the capital expended.

It may safely be said that never was mining capital sought to be raised with such exceptional protection to investors, which the known exceeding richness of the company's properties alone could justify the owner of the mines consenting to.

This the public are convinced of, judging from the demand springing up for the debentures.

RESULTS CERTAIN.

The extent of the profit which will be made by the debenture-holders can be best judged from the fact that the mines paid, with the ore, refuse, and water being raised in leathern sacks by men climbing poles with notches; even ladders and wheel-barrows were unknown.

The above is only a tithe of the wonderful historical and official reports contained in the prospectus, which should be obtained of the secretary, 20, St. Helen's-place, London.

Debentures can be secured by letter to the secretary, enclosing £2 deposit each debenture.

The Consolidated Land and Cattle Company, Limited.

Incorporated under the Companies Acts, 1862 to 1883, whereby the liability of the shareholders is limited to the amount of their Shares.

CAPITAL £750,000, IN 150,000 SHARES OF £5 EACH.

FIRST ISSUE £500,000, IN 100,000 SHARES OF £5 EACH.

Of which 20,000 fully-paid Shares are taken by the Vendors as part of the purchase-money.

For the first three years the Vendors' Shares are to receive no dividend until 8 per cent. has been paid in each year on the Ordinary Shares.

£1 per share payable on application; £1 on allotment; £1 one month after allotment, and the balance by calls of £1 each as required, at intervals of not less than one month. No payment will be made to the vendors until the titles to the ranches have been examined and approved to the satisfaction of the directors by an agent to be appointed by them.

DIRECTORS.

The Right Hon. Lord THURLOW, CHAIRMAN, Dumfries, Morayshire, and 33, Chesham-place, London, S.W.
The Right Hon. the Earl of STRATHMORE, Glamis Castle, Forfarshire, and 41, Queen's Gate Gardens, London, S.W.
The Right Hon. the Earl of MAR and KELLIE, Alloa Park, N.B.
The Right Hon. Lord LOVAT, Beaufort Castle, Inverness-shire, N.B.
Sir GEORGE MACPHERSON GRANT, Bart., M.P., Ballindalloch Castle, Elginshire, N.B.
JOHN McCULLOCH, Esq. (late Inspector in America of the Dundee Mortgage and Investment Companies), Glenhead House, Stranraer, N.B., and 2, Royal Exchange Avenue, London, E.C.
H. C. NEWSON, Esq., Land Agent, 57, Lincoln's Inn Fields, London.

CONSULTING DIRECTORS IN TEXAS.

A. M. BRITTON, Esq., Fort Worth (Manager of the Matador Land and Cattle Company (Limited), and President of City National Bank).

Colonel J. P. SMITH, Banker, and Mayor of Fort Wayne.

BANKERS—THE CLYDESDALE BANK (Limited), 30, Lombard Street, London; St. Vincent Place, Glasgow; and branches.

SOLICITORS—Messrs. SNELL, SON, and GREEN, 1, George Street, Mansion House, E.C., London.

AUDITOR—JAMES GLEGG, Esq., of the firm of Messrs. Quilter, Ball, and Co., Moorgate Street, E.C., London.

MANAGER IN AMERICA—GEORGE B. LOVING, Fort Worth, Texas.

SECRETARY (pro tem.)—H. R. LEWIS, Esq.

OFFICES—BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, LONDON.

PROSPECTUS.

within 40 miles of Colorado City, on the Texas Pacific Railway, which line has in the last few years opened up such facilities as to enormously increase the demand for stock of all kinds from this district.

The ranch houses are situated at suitable distances all over the range, and are provided with the necessary enclosed pastures, yards, branding pens, wagons, harness, and all other camp outfit, to make them in every sense complete.

THE PURCHASE MONEY IS MADE UP AS FOLLOWS:—

74,500 stock cattle at \$25 per head.....	\$1,862,500
100,000 acres of land, free of all incumbrances, and to which warranty deed will be given at \$2.50 per acre.....	250,000
500 first-class stock horses, including several thoroughbred stallions, at \$40 per head.....	20,000
500 saddle horses, at \$40 per head.....	20,000
2000 stock hogs, at \$4.00 per head.....	8,000
1000 selected and improved bulls, at \$62.50 each.....	62,500
Range improvements, including house, fences, camp equipments, furniture, cooking utensils, wagons, &c.....	9,500
Total valuation of property.....	\$2,232,500

This, at \$4.85c. per £, is equal to £460,309.

Should the directors exercise the option to acquire only one or more of the ranches the purchase money will be reduced proportionally to the extent of land and quantity of cattle conveyed and taken over, and in that event the amount payable to the vendors in fully-paid shares will also be proportionally reduced.

The calf crop for the present year, estimated to number between 20,000 and 25,000 head, will, according to the terms of purchase, be the property of the company, without any payment being made for them, thus increasing the number of the herd to about 100,000 head, and reducing the average cost to about \$18.75 per head; and it may be mentioned that in the herd there are about 10,000 steers, which will be ready for market this autumn, which, if sold for \$35 per head, would be \$350 per head more than is being paid for them.

The information given in this prospectus is taken from the reports, made from personal inspection, of Robert Bruce, Esq., of Great Smeaton, Northallerton, a gentleman of considerable practical experience in valuing live stock in England, Scotland, and America, and familiar with ranching business generally; John McCulloch, Esq., of Glenhead House, Stranraer, who is one of the highest authorities on ranch matters in Great Britain (who has joined the board); and Hugh A. Ferguson, Esq., of 35, Welbeck-street, London, a gentleman with great experience in cattle and other live stock. The special attention of investors is called to these reports, copies of which accompany the prospectus.

Mr. Robert Bruce writes:—

"Under proper management, I have not the slightest doubt but that the purchase of the stock and property on the above-mentioned six ranches, at the figures named to me, must be a good investment, and that a handsome percentage on capital invested may be paid year by year, while at the end of a few

years the stock will be increased in number and value at a compound ratio. This increase of stock will be better understood when I state that it can be proved that in this district of Texas over 80 per cent. of the cows will bring calves to the branding pens year after year."

Mr. Ferguson states:—"I consider that the cattle are, on the whole, a very good lot. The range is ample, and the condition the cattle are in at present denotes that feed is abundant. I think there is no doubt that water is plentiful all the year round. The crop of steers for next year will be a large one, and I consider the whole property to be worth the price asked for it. Under good management it should pay good dividends, and, as it is a going concern, no great amount of money should be spent in improvements."

Mr. McCulloch says:—"Taking this range as a breeding one pure and simple, and selling yearlings at present prices, \$18 to \$22 a head, the dividend would be 20 per cent., but as beef will more likely hold or advance on present prices than range cattle I could not counsel the change unless with a provision for fattening the steers, a precaution worthy the consideration of the directors of any cattle company devoted entirely to breeding."

One noticeable fact in the reports is that they were made at different times, by parties entire strangers to each other, and while they never met or consulted with one another yet their reports agree in the main, and differ but little from the description and facts given by the vendors. Copies of these reports in full, together with map of the range, may be had on application at the offices of the company.

The purchase will take effect as from the 1st of March, 1884, and the contract provides that the vendors not only give full and complete warranty to all the properties described, but guarantee and defend the representations made therein, and any deficiency is to be allowed for on the settlement of the purchase. No money will be paid, neither will the company take over the proprietorship of the range, nor assume its management, till the titles have been found to be in conformity with American law.

The only contract entered into is the following—viz., one dated the 22nd day of March, 1884, made between the Texas Investment Company (Limited) of the first part, George Barnett Loving, of the second part, and Frederick Charles Pocklington, as trustee on behalf of this company, of the third part, for the sale and purchase of the before-mentioned ranches, stock, and improvements, at the sum of \$2,232,500, equal to £460,309 sterling.

All preliminary and other expenses of and incident to the formation of the company up to the allotment of shares are undertaken by the vendors, who are the promoters; and in the event of not going to allotment the deposits, or in the event of the report of the agents, to be selected by the directors to verify the titles and take over the properties, not being to their satisfaction, the moneys paid upon deposit and allotment, will be returned in full. In the event of the company taking over the properties, the sum of £1000 will be paid to the vendors in respect of the reports of Messrs. Bruce and Ferguson.

Application for shares, accompanied by a deposit of £1 per share, may be addressed to the Company's Bankers, or to the Secretary at the Office of the Company.

This company is formed to purchase and consolidate the well-known Wren, Hutton, Millap, and Milliken, Mann, Jackson, and Elkin Cattle Herds and Ranches, consisting of 100,000 acres of freehold lands, 75,000 heads of branded cattle, and the calf crop of 1884, estimated to number 20,000 to 25,000 head, also 1500 horses, 2000 hogs, range implements, equipment, improvements, &c., all in the State of Texas, U.S.A., and to carry on the business of raising cattle and other live stock in the United States of America. The directors have obtained the option to acquire all or any of the said ranches as they may see fit.

The object of transferring the herds to a single company is to lessen the proportionate expenses, extend the improvements, and develop the herds, which combined will form one of the largest, as they are already well known to be among the best graded, herds of any magnitude in the State.

The business of cattle raising in the Western States of America is now acknowledged to be highly remunerative. Numerous companies have lately been formed for carrying it on, and are working very successfully. The following figures will show the last dividends paid by range companies formed during the last few years, and as this class of investment is rapidly growing in public favour shares are likely to advance very considerably in value:—

Arkansas Land and Cattle Company.....	10 per cent.
Matador Land and Cattle Company.....	8 "
Missouri Land and Cattle Company.....	10 "
Powder River Cattle Company.....	10 "
Prairie Cattle Company.....	10 "
Swan Company.....	25 ½ "
Texas Land and Cattle Company.....	9 "
Western Land and Cattle Company.....	12 ½ "
Western Land and Cattle Company.....	15 "

The ranches proposed to be acquired by this company are admirably adapted for consolidating into one large property, because they dovetail into each other, there being no other herds or ranches between them. They occupy both sides of the Double Mountain Forks of the Brazos River for a distance of about 60 miles, and both sides of the Salt Fork of the Brazos river for 30 miles; and as one of the best means of securing the water privileges, 100,000 acres of freehold land have been selected in good positions, thus practically ensuring the future possession of the range, which is about 3000 square miles of the finest grazing lands in the States, and estimated to be capable of maintaining easily 120,000 head of cattle. The freehold of the remainder of the range can be either leased or purchased at a moderate price should the company desire to do so later on the expediency of which the directors will take into their consideration, and it should be noted that no payment will be made to the vendors in respect of any range rights.

It should be pointed out that in addition to the water from the rivers named, there are numerous creeks and well-watered streams scattered over the entire range, and at no season of the year will the cattle require to travel any great distance to find an abundance of good water; in fact, the moderate climate, the excellence of the grazing land, and abundance of water and shelter at all seasons, combined to make these ranches one of the most valuable pastoral properties in the States, and when consolidated under one management will give still more important results.

The position of the ranches with regard to markets is excellent. They are

Meetings of Public Companies.

TREVAUNANCE UNITED MINES.

The four-monthly meeting of shareholders was held at the offices of the company Walbrook, on Wednesday, Mr. JOHN B. REYNOLDS in the chair.

Mr. FREDK. J. HARVEY (the secretary) read the notice calling the meeting, and also the accounts, showing a balance of cash at the bankers of 1957. 14s. 2d., with no liabilities due and unpaid, and said that they had been audited by Mr. Payne, one of the shareholders.

Mr. HARVEY also read the manager's report, as follows:—
March 25.—I beg to hand you the following report. At the meeting held on Nov. 28, 1883, I stated in my report that we had intersected a copper lode worth 152. per fathom, and that we were then pushing on the cross-cut south to intersect the south part. We have since intersected that part of the lode, and finding it of but little value we commenced to drive east on the copper lode; we have driven about 3 fms. on the lode, which continues to improve, and is now a rich lode of black copper ore. From an assay of the ore now to hand I find the lode is worth over 300. per fathom. The end is now being driven for 64. per fathom. You can see for yourself if this lode continues we have a rich mine. I consider this to be the Pink lode that has given over 100,000. profits in the Penhalls and Pink Mines to the east of this mine. This lode has never been seen below the adit or 55 in this mine. I consider this rich course of copper will be followed by a great course of tin in depth.—W. VIVIAN.

The CHAIRMAN said:—Gentlemen, I am very glad to say there will be no necessity for me to detain you long this morning; but I rise to move the adoption of the statement of accounts, and the agent's report, with unqualified satisfaction. (Hear, hear.) I do not know that I was ever more pleased to meet shareholders in my life than I am pleased to meet you to-day. I heartily congratulate you. I believe that the discovery which has been made in Trevaunance is one of the most important discoveries which have been made in the St. Agnes district for many years. (Hear, hear.) Of course you will recollect, gentlemen, that we have only driven about 3 fms. on this course of ore; but you will be glad to know that the lode never looked better than it does at the present point. Now, when we consider that this is the Pink lode—one of the champion lodes of the district—you will appreciate the importance of this improvement, the more so when I remind you that this Pink lode has given in the Penhalls Mine a profit of 100,000. (Cheers.) You can see the nature of the ore, for Capt. Vivian has very kindly brought a specimen of it up for inspection, and probably this is, at present, the richest copper lode in the county of Cornwall. Capt. Vivian values it at 300. per fathom; it is worth that, gentlemen, and something more. (Cheers.) I need not tell you, gentlemen, the exact valuation of it, although Capt. Vivian has informed me, because we do not wish to unduly raise your expectations. I remind you again, however, that it is very rich; but at present we have only driven on it for a distance of 3 fms. Well, and this is the Pink lode, there is every reason to believe that it is a permanent affair, and this lode remains entirely undeveloped in the Trevaunance United Mines set. I do not know, gentlemen, whether you are to be most congratulated, or the St. Agnes district generally. I believe they are in high spirits there. When we recollect the stagnation which now undoubtedly exists in mining, we ought to be very grateful indeed. (Cheers.) There was never a time when there was a louder call for labour than at the present time, and the more men we can judiciously employ the better we shall be pleased, when they stand in need of employment as they do now. You will see that the sale of tin have been in the increase. That you were less to expect, and you will understand the reason; but some of you, I dare say, will entertain the idea that notwithstanding this very important discovery you had rather you had met with a lode of tin. Gentlemen, I do not share in that disappointment in the least. It is a mere accident that we have cut into the lode where it is producing rich copper ore—an accident very common in this district; and my opinion is that as surely as we have cut into the copper lode so surely as we will find the immediate locality a rich course of tin. (Cheers.) Trevaunance have always told you would be a credit to the management, to the district, and to this office. I will leave you now to judge whether I have been too sanguine in my anticipations concerning the future. (Cheers.) The accounts have been very carefully kept by the secretary—Mr. Harvey; the bank-book is on the table, and the list of shareholders and other matters are open for your inspection. This is a meeting, gentlemen, where it is very advisable that a full discussion should take place on the company's affairs. I am glad to see such attendance here to-day, and I may say that the Trevaunance shareholders, that whilst they always attend in good numbers the meetings of the company they give very little trouble to the officers in the intervals between the meetings. Now, there is a matter which I want to bring before you of some considerable importance, involving, as it does, a change which I fear may not be welcome to many of you. Mr. Harvey has repeatedly told me that the work was more than he could manage, and he wishes to be relieved of a portion, in order that he may devote his time to other duties which he considers of great importance. I think, probably, that you, gentlemen, would be influenced by a great measure by what I might say on the matter, and, therefore, I stated, as far as my influence is concerned, he was at liberty to choose whatever work in the office he thought proper, and that if he liked to be my private secretary I should be delighted to have him in that capacity; but if he would prefer remaining as secretary of the company I should be glad to use all my influence in his favour, and I was assured of the confidence and support of all the shareholders. Well, gentlemen, I carefully looked over Mr. Harvey's account, and I am, in every respect, qualified to tell all the office now so ably filled by Mr. Harvey in connection with this company, and when Mr. Harvey comes to speak to you directly no doubt he will confirm that statement, and the best arrangement I can suggest to you is, that he should be so appointed to fill the vacancy which will be presently created by Mr. Harvey's retirement. Mr. Harvey will, of course, remain in the office, and will be the principal in the office next to myself; and I propose, therefore, that everything connected with this company shall pass under Mr. Harvey's review, as auditor of the company. I think that will be an arrangement which will be satisfactory to the shareholders, and all things considered they will be very glad to fall in with these views. I am very grateful indeed, to be able to give you such an account of Trevaunance, which I candidly confess, has never surpassed since I first had the pleasure of naming to you the riches which you have discovered in West Kitty. (Cheers.) Gentlemen, I have pleasure in moving the adoption of the accounts and the agent's report.

Mr. S. PAYNE said he had great pleasure in seconding the motion, and he was sure they would all rejoice in the good news they had heard concerning Trevaunance, which was really better than they anticipated. (Hear, hear.) They could hardly have anticipated that so rich a discovery would have been made so swiftly, and it now seemed to him almost a certainty that Trevaunance would be the next mine in the St. Agnes district to enter the Dividend List. (Cheers.)
The CHAIRMAN said he should be happy to hear any observations or answer any questions.
Mr. S. PAYNE said everything seemed so satisfactory that there were really no questions to be put, but he thought that the shareholders would like to hear a few remarks from Capt. Vivian. (Hear, hear.)
Capt. VIVIAN: I do not know what more can be said than has already been said. I do not like to come to a meeting with improvements or an improvement just for the meeting. People have made very unkind remarks, not about our mines but about the kind report to a meeting. (A laugh.) Well, this lode has been driven over 100,000. profits, and I think that we had cut this lode, and I then reported it was worth 152. per fathom for copper. Not being a copper district I did not pay much attention to it. There was another part of the lode, a tin lode, very hard, and we pushed on, and we have cut that part of the lode. There is tin in it, but not rich. I began to consider the matter, and I thought the copper part was the best of the two. Some few weeks ago I put the men to open on the copper part of the lode, and we have opened about 3 fms., and the lode has continued to improve. I do not generally bring specimens, but that stone was broken on Monday night. The lode still continued improving. I took a sample of what had been broken from the lode and sent it to the assayer, and I have the result here. It is very rich copper ore, very rich indeed, and if this lode continues it will be a very good thing indeed. (Cheers.) In fact we are driving this end for 64. per fathom, and it is worth 300. Not being a copper district I have not valued it up to what it will really assay. We may get some hundreds or thousands of pounds worth of this copper. But I calculate this is the outcrop of a great course of tin. (Cheers.) I state in my report that the eastern hill has given over 100,000. profits, and the lode is standing in this level below the adit or sea level, where it has never been seen or touched. I consider this myself to be a grand discovery. I may be disappointed, but I have always looked upon the Pink lode to be a good speculation. Mr. Reynolds said just now, I think, that Trevaunance will be the next dividend mine in the district. That is my firm conviction. I am pleased and happy to meet you under present circumstances, for really if I did not think that any mine which I took in hand was not going to be a success I should not touch it. We all know that mining is a very uncertain thing, and in West Kitty we have sold months we have doubled our returns, and in West Kitty we have sold between 300. and 400. worth of copper. It is in the midst of our best course of tin, and we have struck it in Trevaunance, so that we have the copper in the three mines at the same time, which is rather a singular thing. (Cheers.)
A SHAREHOLDER: What about a call?
Capt. VIVIAN: If we were certain it would continue we should not require a call to-day; but, seeing that little has been done, it is for you to decide whether you will make a call. We are a "No credit company," but when we sell a parcel of copper we are two months before we get the money. If we sell tin we get a bill at once. I do not think there is quite money enough in hand to carry on four months.

Mr. MICHELL said he did not think they could quite count on bringing sufficient ore to surface to pay the costs for the next four months. This was an excellent discovery, and the simplicity of dressing was greatly in their favour. The ore was so rich that it did not want concentration; it was concentrated enough in itself, and it simply wanted to be broken down, and the stones and waste picked out and reduced to a size suitable for the smelting furnace.
Capt. VIVIAN said he might mention that in all probability they would have to put up an engine to work the mine; and if the present state of things continued he should, at the next meeting, have to recommend the shareholders to put up an engine. He hoped, in the meantime, they might get copper enough to pay for the engine. (Cheers.) It would also be necessary to appoint an engi-

neer, and they could not do better than appoint Mr. Michell, who had erected the excellent engines on the West Kitty and neighbouring mines. (Hear.)
The CHAIRMAN said that they could not do better than appoint Mr. Michell, who was one of the best engineers in the county of Cornwall, and who had served some of the other companies in the same capacity with singular fidelity.

The resolution for the adoption of the report and accounts was then put and carried unanimously.

On the motion of Capt. VIVIAN, seconded by a SHAREHOLDER, Mr. Michell was then elected engineer to the company.

The CHAIRMAN said the appointment would not involve any payment till there was work to do. As regarded a call he thought it would be better to make a small call, as it would make the financial position of the company so much better. A shilling call would be amply sufficient.

Mr. S. PAYNE expressed his great gratification at the present promising position of the company. He moved that a call of 1s. per share be made, payable to the bankers of the company, Messrs. Williams, Williams, and Grylls, Truro, on or before April 15.

The motion having been seconded, was carried unanimously.

On the motion of Mr. BUMPUS, seconded by Mr. DORE, the audit and finance committee were re-elected, with thanks to them for their services.

Mr. HARVEY then tendered his resignation as secretary. He expressed his regret at being compelled to do this, but said the press of work was so great that he could not do it. He also said that Mr. Reynolds' private work. With respect to Mr. Williamson Reynolds, who would no doubt be his successor, he could only say that he had had opportunities of seeing that gentleman's capacity and aptitude for business, and had found him to be exceptionally careful, accurate, and thorough in all he did. (Cheers.)

Mr. G. BUDD moved that the resignation of Mr. Harvey be accepted, and that the best thanks of the shareholders be given to him for his diligent and faithful services to the company.—Mr. GAIT seconded the motion, which was carried unanimously.

Mr. LENOX then proposed the election of Mr. Williamson J. Reynolds as secretary, at a salary of 50. per month. He expressed the great pleasure it gave him to move the resolution, and he was sure Mr. Reynolds would ably fulfil the duties of the office.—A SHAREHOLDER seconded the motion in most complimentary terms, which was carried unanimously.

Mr. WILLIAMSON J. REYNOLDS acknowledged his election.
On the motion of the CHAIRMAN, seconded by Mr. PAYNE, Mr. F. J. Harvey was unanimously appointed auditor of the company.
Mr. MICHELL also acknowledged his election to the office of engineer.
On the motion of Mr. MICHELL a cordial vote of thanks was passed to the Chairman, and the meeting broke up.

NEW KITTY MINE COMPANY.

A four-monthly meeting of shareholders was held at the offices of the company, Walbrook, on Wednesday, Mr. JOHN B. REYNOLDS presiding.

Mr. FREDK. J. HARVEY (the secretary) read the notice convening the meeting, and the statement of accounts, showing a balance of cash at the bankers of 1637. 16s. 9d., with no liabilities due and unpaid.

Mr. HARVEY also read the managers report, as under:—

March 25.—I beg to hand you the following report. Since the meeting held on Nov. 28, 1883, we have driven about 11 fms. on the course of the lode at the 50. level, and we have opened new altogether about 20 fms. both east and west of the cross-cut, but the lode is of no value. We went a month since we resumed the driving of the cross-cut north of the lode that we have opened on; the cross-cut is letting out large streams of water. I propose to push on this cross-cut.—Thomas's Shaft: This shaft at the time of the last meeting was down 18 fms. below the adit level; we have since completed the sinking of the shaft to the 20. also cut a pit and fixed a standing lift at this level. The shaft is now about 4 fms. below the 20. lode about 3 ft. wide, producing a large quantity of muck, and a little copper and tin, a very promising lode indeed. Seeing we have now opened a good course of tin at the 60 in West Kitty Mine directly under Thomas's shaft, I am daily expecting to meet with results in this shaft similar to West Kitty. The 20. east of Thomas's shaft, we have opened about 8 fms. on the course of the lode; lode in the present end 1½ ft. wide, producing a little tin, but not to value.—W. VIVIAN.

The CHAIRMAN said: I rise with great pleasure to move the adoption of the statement of accounts and the manager's report, but in doing so I confess that I feel a little diffidence because, unfortunately, I am but a small shareholder in this company. But I suppose I have been requested to take the chair because it is known that I represent a very large interest in this company, and that there are certain gentlemen connected with this mining property who look to me for advice and for guidance. (Hear, hear.) I am, therefore, very kindly understand that in the capacity of Chairman I do not profess to be a large shareholder, but I only profess to do my best in the interest of those whom I have the honour to represent. (Applause.) The property, the interests of which we are called to consider to-day, is certainly a very remarkable one for a situation. There are some persons who I have heard are a little disappointed because we have not yet met with any very decided and important discoveries, but those gentlemen who are disappointed because we have not yet achieved any remarkable results know very little of mining, and have had little experience of this sort of business. The fact is that in mining, as in everything else, great results are only obtained by patient labour. It is only the patient sower who reaps the abundant harvest. Now, gentlemen, some of you may be looking for important profits in connection with West Kitty, and the question that arises is are you justified in looking for great things, because if you are not the sooner you abandon it the better; but if you are, then, please, courage and come forward like men in support of it. (Cheers.) Those of you who have been at St. Agnes, and have seen the prospects of your mine, what shall I say first of all is its position. It not only adjoins West Kitty, but it adjoins what is becoming the richest part of West Kitty. Well, that is the western ground of West Kitty, and what are the prospects of the western ground of West Kitty to-day? They are as good as the prospects were in the eastern part, and we are likely to get as good a mine. What grounds are there for saying that we are likely to have a good mine in New Kitty? In the bottom of Thomas's shaft there is a large quantity of muck, and will anybody tell me that this is not a quantity of tin? I am sorry that the stream of tin being found in close proximity. We know the old saying—"that muck always rides a good horse." (Laughter, and applause.) The circumstances of there being so much muck must appeal to every man of common sense with force. (Cheers.) The report of Captain Vivian is of a most favourable description, and there are unmistakable signs that the lode is of a porous description, and that there is something good ahead. There are some persons who have said that we are not working fast enough, but those who said this should consider more. We are doing the same as was done in West Kitty, and if we had expended double the money in West Kitty we should only have had the same results. We do not go in for show, but for common sense, and lay out your money only in those places where there is every chance of reaping a good harvest. I shall endorse Capt. Vivian's views that we should push on at the important points stated in Capt. Vivian's report. You have every encouragement to persevere, and I should not be surprised to find any day that very important discoveries have been made in this mine, as I believe that in it you have a very valuable set. Now, there being the same as in the prospects of your mine, what shall I say in respect to the finances? Whether you think so or not, you ought to be thankful your company has been kept in such a sound financial position. You have gone on the "No credit system," and you have no liabilities unpaid. You have been laughing at when you first started this system, but other companies have been glad to adopt it. When you consider the history of Cornish mining, I must say that I think no system can be more safe or sound, involving as it does the essence of Limited Liability. So much, gentlemen, for the district and for the financial department. (Hear, hear.) I am sorry that the stream of tin in this office has become so great as to make some change absolutely necessary. The present secretary has borne the strain so long that he can bear it no longer, and there must be a sub-division of labour. We never shall have a better servant than Mr. Harvey, but he asks for relief and we must give it to him. My son is now a candidate for the secretaryship of this company, which will be vacated directly by Mr. Harvey. It will remain with you, gentlemen, to say whether you will elect him or not. All I can say is that if you elect him you will never regret having done so. Well then, I think, it would be right for us to elect Mr. Harvey to the position of auditor. In my opinion every company ought to have an auditor; and, therefore, I shall recommend you to elect Mr. Harvey as auditor, in order that everything in connection with the company may pass under his eyes from time to time; and with two such officers I am sure you will want for nothing as far as the manner in which the work will be done is concerned. I may say that everything that transpires in this office I am personally responsible for. I am glad to see such a large attendance to-day, for it shows an interest in a mine which I believe is destined to take a leading position among Cornish mines. (Applause.)
Mr. COUZENS said he had much pleasure in seconding the resolution for the adoption of the accounts and Capt. Vivian's report.

Captain VIVIAN, who was received with applause, said they were pushing on the works as fast as possible. It seemed from a hint thrown out by the Chairman that some people thought the mine ought to be worked faster. As the manager, he should like to know how this was to be done. They were working the two important points, and he had six men driving the cross-cut, and they could not work at those points unless the company were prepared to adopt boring machinery. Instead of expending 1500. a month they might expend 300., but that would bring them no nearer the object in view, so that if they could save 1500. a month so much the better for them. (Applause.) They had come to large rocks of muck. The lode was precisely the same as in West Kitty. They were pushing on Thomas's shaft as fast as they could; it seemed as if every foot they went the lode was increasing, and he saw no reason why any day they should not make a good supply of tin.

Mr. F. W. MICHELL said, if they looked to mining in Cornwall they would find that miners always came upon iron before they found anything else. There was iron in the muck, and they were almost certain then to come upon a quantity of tin. When there were these large slabs of muck there must be tin not far off, for, as the Chairman had observed, "Muck rode a good horse." (Applause.)
Mr. COUZENS said he had recently paid a visit to Cornwall. He had seen the New Kitty Mine, and he was more satisfied in regard to it than before. He was convinced that it was merely a question of time in regard to their finding tin. He had risked a good deal in New Kitty, and he believed he had acted wisely. He had great faith in Captain Vivian's driving the cross cut, and he believed before long they would hear of something good.

The resolution was then put, and carried unanimously.
Mr. COUZENS proposed that there should be a call of 2s. per share, to provide for the next three months' working of the mine.—Mr. BELLINGHAM seconded the motion, which was also agreed to unanimously.

On the motion of Mr. BELLINGHAM, seconded by Mr. MICHELL, the thanks of the meeting were voted to the audit and finance committee for their services. The committee was re-elected.

Mr. HARVEY, in response to the call of the meeting, said he found the work in connection with the secretaryship of the office had increased so greatly that he could not attend to it. He was Mr. Reynolds' managing clerk, and he had to

neglect his work to attend to the business of the secretaryship. He was, therefore, compelled with regret to resign the position of secretary.

Mr. J. J. GAIT moved that the resignation of Mr. Harvey be accepted, and that the thanks of the meeting be accorded to him for his faithful and diligent services.—Mr. BELLINGHAM seconded the resolution.

Mr. DUTTON expressed his regret that Mr. Harvey should have found it necessary to resign.—The resolution was put and agreed to unanimously.

The CHAIRMAN said he shared in the regret expressed by Mr. Dutton.

Mr. HARVEY briefly acknowledged the vote of thanks to him.

Mr. LENOX moved the appointment of Mr. Reynolds, jun., as Mr. Harvey's successor, and a SHAREHOLDER seconded the proposition, which was carried unanimously.

On the proposition of the CHAIRMAN Mr. Harvey was appointed auditor.

The CHAIRMAN, in reply to Mr. COUZENS, said there was no salary attached to the office at present, but if the mine turned out as was expected the work of the audit would become an important matter. It would simply be a question of a small fee from time to time.

A vote of thanks to the Chairman closed the proceedings.

WEST KITTY MINE.

The four-monthly meeting of shareholders was held at the offices of the company, Walbrook, on Thursday, Mr. JOHN B. REYNOLDS in the chair.

Mr. FREDK. J. HARVEY (the secretary) read the notice calling the meeting, and also the agent's report, as follows:—

March 28.—I beg to hand you the following report:—In the 34 we are putting up a rise in the back of the cross-cut, about 40 fms. north of the engine-shaft. I am expecting daily to intersect the lode. This point is about 50 fms. deeper on the course of the lode than the level above. In the 30, driving east, the lode is worth 94. per fathom. In the 72, driving east, the lode is worth 132. per fathom. In the 72 west, in the last 5 fathoms driven the lode was small and poor, and it has gone very much off its course; I think the principal part of the lode must be to the south. I have put the men to drive a cross-cut south. In the 60, driving east of rise, the lode is worth 144. per fathom. In the rise in the back of the 60, east of main rise, the lode is worth 104. per fm. In the 60, east of cross-cut, the lode is worth 404. per fathom. In the 60, west of cross-cut, the lode is worth 154. per fathom. In the 50, driving east of No. 1 rise, the lode is worth 104. per fathom. In the 50, driving east of No. 2 rise, the lode is worth 124. per fathom. In the stopes in the bottom of the 72 the lode is worth 204. per fathom. In the stopes in back of the 72, west of main rise, the lode is worth 304. per fm. In the stopes in back of the 72, east of main rise, the lode is worth 504. per fathom. In the stopes in the back of the 60, east of cross-cut, the lode is worth 504. per fathom. I beg to state that the prospects of the mine were never better than at the present time. You will see we have increased our returns of tin in the last four months, and can continue to do so if the mine continues to improve. It should be remembered that in the past four months we have had five pays and four months' tin, which will make a difference of 2s. per share on our dividend this time, but that will not occur again for the next two general meetings.—Wm. VIVIAN.

The statement of accounts (copies of which were distributed amongst the shareholders at the meeting), showing a balance of cash at the bankers of 32637. 6s. 5d., with no liabilities due and unpaid, was taken as read.

The CHAIRMAN said: Gentlemen, I am very pleased to see such a large attendance here to-day; it shows the interest you take in this very prosperous company. I am the more pleased to see you because the statement which we have the pleasure of rendering is the most successful statement ever rendered in the history of this mine. (Cheers.) You will find by the printed statement that the credit cash balance brought down is 32637. 6s. 5d.; but you will also find, as Captain Vivian has very properly pointed out in his report, that whereas we have only four months' returns we have five months' costs, which have been paid. I am happy to inform you also that there are no liabilities which are due and unpaid, and that our last pay day at the mine was last Saturday, so that the costs are brought up to the latest possible date—Feb. 23 in this year. Now, gentlemen, if we had not the five months' pay—that is, if we had four months' pay, against four months' returns, our dividend to-day would have been 2s. in excess of that which we shall be able to declare; but if tin had been at the same price which it was between the meeting before last and last meeting, our dividend to-day would be 4s. per share in excess of what we shall now pay—that is to say, including, of course, the extra month's cost. But, gentlemen, considering these facts, I am sure it will be a matter of surprise to the outsiders, and of congratulation to you, that we are in a position to divide to-day the sum of 10s. per share. (Cheers.) We could do more than this, but you will doubtless agree with me and the committee that it is quite safe to divide what we shall have your unanimous approval in deciding it would not be wise to divide up to the very utmost limit. We shall have a credit balance of 2637. 6s. 5d. if we declare a 10s. dividend, and you will find at our next meeting that you will have the benefit of that arrangement. (Cheers.) I do not like to forecast the future, but I may tell you, for your information, that if tin keeps at the present price, and there seems to be no probability, as far as I can judge from those who are well-informed, that tin will go lower, it keeps at the present price I may tell you for your information that your dividend next time will, of course, be better dividend than the dividend which we declare to-day. I will not say more than that, but leave you to guess whatever you like. (A laugh.) With respect to the mine itself, Capt. Vivian has told you that the prospects were never better than at the present moment. Gentlemen, he might have gone further, and he might have said they never were so good. (Cheers.) You will notice that his reports are always extremely moderate, and that they are never, under any circumstances, over-coloured; and in this instance I find, in a great measure, the confidence which he enjoys as far as his employers are concerned. The principal new feature in the mine since the last meeting has been the improvement in the western ground. In the 60 fm. level the ground is now worth 154. per fathom, but the lode now improving. We have now passed through a small cross-course and we find as we pass that point that the lode increases in value. Captain Vivian has also driven a cross-cut at the 72 fm. level west in a southerly direction, and Mr. Dutton, I have no doubt, will tell you that this was a wise course adopted, and that it is a promising one. It is a promising good thing before long. In all parts of the mine the prospects are as good as we could reasonably desire. There is no doubt whatever that West Kitty deserves the character it has, and I have no doubt it will prove to be what the most sanguine anticipated, and a far richer property than ever its most sanguine admirers ever hoped. This will be an advantage, not only to you, but also to the St. Agnes district. Whilst I am on this subject, allow me to say that we regard with the greatest possible pleasure the efforts of all those, whoever they may be, who extend mining operations in this locality. They have the advantage of the confidence which they enjoy as far as their employers are concerned. The principal new feature in the mine since the last meeting has been the improvement in the western ground. In the 60 fm. level the ground is now worth 154. per fathom, but the lode now improving. We have now passed through a small cross-course and we find as we pass that point that the lode increases in value. Captain Vivian has also driven a cross-cut at the 72 fm. level west in a southerly direction, and Mr. Dutton, I have no doubt, will tell you that this was a wise course adopted, and that it is a promising one. It is a promising good thing before long. In all parts of the mine the prospects are as good as we could reasonably desire. There is no doubt whatever that West Kitty deserves the character it has, and I have no doubt it will prove to be what the most sanguine anticipated, and a far richer property than ever its most sanguine admirers ever hoped. This will be an advantage, not only to you, but also to the St. Agnes district. Whilst I am on this subject, allow me to say that we regard with the greatest possible pleasure the efforts of all those, whoever they may be, who extend mining operations in this locality. They have the advantage of the confidence which they enjoy as far as their employers are concerned. The principal new feature in the mine since the last meeting has been the improvement in the western ground. In the 60 fm. level the ground is now worth 154. per fathom, but the lode now improving. We have now passed through a small cross-course and we find as we pass that point that the lode increases in value. Captain Vivian has also driven a cross-cut at the 72 fm. level west in a southerly direction, and Mr. Dutton, I have no doubt, will tell you that this was a wise course adopted, and that it is a promising one. It is a promising good thing before long. In all parts of the mine the prospects are as good as we could reasonably desire. There is no doubt whatever that West Kitty deserves the character it has, and I have no doubt it will prove to be what the most sanguine anticipated, and a far richer property than ever its most sanguine admirers ever hoped. This will be an advantage, not only to you, but also to the St. Agnes district. Whilst I am on this subject, allow me to say that we regard with the greatest possible pleasure the efforts of all those, whoever they may be, who extend mining operations in this locality. They have the advantage of the confidence which they enjoy as far as their employers are concerned.

Mr. DUTTON said he had great pleasure in seconding the motion. He thought they were all congratulating themselves upon the result of the four months' working and the prospect of increased prosperity. Even with the present low price of tin they might be well satisfied with the dividend which was to be proposed. As regarded the western ground he should like Capt. Vivian to explain that in his own way. It was of the greatest importance. He believed that they had in the western part of the mine ground equal to anything they had seen in the eastern part. If the rich ground continued far west the importance of the mine was enormous. There was enough there for two mines, in fact. (Cheers.)
Capt. VIVIAN said that with regard to the western ground there had been a very good improvement; in fact, it was another shoot of tin altogether. He reported four months ago that they had met with something good. They had opened now 10 fms. on the lode, and he found it very good indeed. After they had cut the cross-course they found that the mine still went on improving, and he had valued it at 154. per fm.; and as far as he could tell he could not see why they should not be as good a course of tin there as in the eastern part. (Cheers.) They had driven the distance of the lode in the 70, and it was improving. He believed that the lode they had at the 50 was still standing to the south, and if they cut it as rich as the 70 they would have 300 to 400 fms. of ground to the west; so there was plenty of room for a mine there. In West Kitty they had a mine, not for a month or a year, but for very many years. As showing the value of the tin he mentioned that about 177 tons had realised the large figure of 30000. profit, and there was not another mine in Cornwall which could compete with them in that respect. (Cheers.)

The resolution for the adoption of the report and accounts was then put and carried unanimously.

Mr. G. BUDD moved that a dividend of 10s. per share be paid forthwith on the 6000 shares of the company, free of income tax. They were not in a position to pay more than that without drawing slightly upon their credit, and this would be unwise considering the mine was conducted strictly on the "No credit system." The dividend to be declared to-day was exactly the amount of net earnings on the working.—Mr. BUMPUS seconded the motion. He said the statement which had been made fully explained why the dividend was not larger. He thought for shareholders had good reason to be satisfied, especially as they might look forward to a better dividend at the next meeting.

The resolution was carried unanimously.
Mr. J. H. COZENS moved a vote of thanks to the committee for their services, and that they be re-elected. He had great pleasure in proposing that, because the committee of this mine had always done their duty. He did not use this as any conventional phrase at all. They knew very well that in Cornwall there had been complaints of the way in which some committees had performed their duties, and he was kept silent and oversight over the mine, and the consequence was that the shareholders had gone to meetings, and had found they were in debt, with heavy calls to make. (Hear, hear.) At the last meeting in Cornwall, he had stated that this mine had set an excellent example to other mines in Cornwall; he considered that was so especially in regard to the way in which they conducted the financial part of the company. (Cheers.)
Mr. S. JAMES seconded the motion. He was sure the shareholders must be gratified to come to the meeting and hear such an extraordinary statement of accounts. The price at which they had sold the tin was extremely satisfactory, 117 tons having realised 30000. profit.—The motion was agreed to.

Mr. MICHELL returned thanks on the part of the committee, and fully agreed with all that had been said regarding the very promising appearance of the western portion of the mine.

Mr. LENOX proposed a cordial vote of thanks to Capt. Vivian, for his able management, which was seconded by Mr. S. PAYNE, and carried unanimously.
Capt. VIVIAN acknowledged the vote. He said he did not put the tin where it was, but he knew how to take it out, and he, whilst he was in their service, would do his best to take it away, and to give as much profit as possible. Reference had been made again and again to the western ground. He believed it was the West Kitty lode which they had going back in the western ground. They had 300 fms. of ground there. There were something like 11 parallel lodes which had been worked upon in the western ground, and nine out of the 11 had

been productive, and there was no reason to doubt that there would be good a course of tin in the western ground as in the eastern ground.

On the motion of Mr. LEXNOR, seconded by Mr. BUNN, a cordial vote of thanks was passed to the Chairman, and the meeting broke up.

TANKERVILLE GREAT CONSOLS.

A meeting of shareholders was held at the offices of the company Austin Friars, on Wednesday.—Mr. PETER WATSON in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice calling the meeting, and the report of the directors was taken as read.

The CHAIRMAN, after expressing regret at the unavoidable absence of Mr. Samuel York, one of the directors, said:—It is the old story which the Chairman of a lead mining company has now always to tell at the periodical meetings of the shareholders. We seem year by year to get deeper into the mire with respect to the price of lead. Such a depreciation has never been known—I was going to say—but I find that the price of pig-lead many years ago was down to about 11s., whereas the price of ore was better than it is now. At the same time we have seen great fluctuations in the price of lead ore. We have seen it as low as 6s. 10s., and as high as 18s. Pig-lead has fallen to 11s., at which price it is at the present moment, and it has been up to 25s. and 30s., and even to 35s. a ton. Whether we have got to the bottom of the market remains to be seen, but I should think we have. Turning to the affairs of this company, I may remind the meeting that several circulars have been sent out calling upon the shareholders to subscribe for the capital remaining in preference shares, which amounts to £286. Had those shares been taken up our capital account would have presented a different state from what it now does. We have really had to struggle on, and the work of the directors can only be described as arduous. They have not only had to do the work of the company, but to finance it—to lend money from time to time out of their own pockets. The directors are the largest shareholders. My friend Mr. Shaw has the largest number of shares. I think I follow him, Mr. Bentley is next, and Mr. York has also a large holding. It has, however, been very hard upon the directors that they should have had to finance the company, but had we not done so the mines must have stopped, and even as it is they have suffered severely from want of capital. No sooner had we got into the Bog Mine than we found very rich courses of lead ore. We did very well for a time, but unfortunately we had not the capital to push down the shaft. If the shareholders had come forward and subscribed this money we should have been down another 12 or 15 fms., and opened out good reserves, and should have had a very different account with regard to Bog. Pennerley has sold 511 tons during the last six months, but owing to the price of lead the loss has been about 1000. The Bog Mine has sold 3200 tons, and the loss there has been the same or a little more, leaving a total debit of £444. 8s. 4d. as the loss on the half year. We have done all we can with the lodes, and even on Saturday I went to see them at Shrewsbury to impress upon them the importance of modifying the royalty arrangement, and I have a very favourable answer, to which I will presently refer. So far as the Bog Mine is concerned we think that if water were let into the 148 level until things get better we should save about 250l. or 300l. a month, and be able at least to pay our way in that mine. That, however, should be a rich deposit of ore. There is, in my opinion, no doubt about it. On my last visit but one to the Bog Mine I am sorry to tell you I caught a very severe cold, which caused a serious illness. I had rheumatism in the knees, a complaint from which I had never previously suffered, but one of which I fear I shall never get rid. I have given attention to this mine by night and by day, and Mr. J. H. A. Smith, who sits beside me, has been again and again at my house with me in looking after the affairs of the company with me, and I have had to find money to preserve it alive to the present day. I have only to conclude by saying—"That the report and accounts be read and adopted."

Mr. BENTLEY (director) seconded the motion.

Mr. WILDE, from the standpoint of a large experience, confirmed all that the Chairman had said with respect to the present state of the lead trade. It was, therefore, not a very encouraging time to ask shareholders to put more money into lead mines, but he admitted that the circumstances here were exceptional. He did not think that in addition to their labour and anxiety the directors should be called upon to finance the company. It was most unfair to them. As a director of several companies he must say he never put his name to a loan except where there was a clear case, and it was not fair upon the directors.

Mr. H. WILSON (director): *Necessitas non habet legem.* (Laughter.)

Mr. WILDE said he understood that; but in such times as these he thought the dead weight should be reduced as much as could be done with safety and justice to the mine, and in accordance with the lease. All the lead raised was practically put upon the market at a loss. Better times must come. As the directors had so willingly advanced money it did not become him perhaps to grumble at the fees, but as they were paid he must say it was a good deal to pay in these hard times. Still as the directors were personally liable for their advances he scarcely liked to make this remark. (Laughter.)

The CHAIRMAN: With regard to the fees of the directors I may mention that Mr. Shaw is one of the largest shareholders. He comes up regularly from Wolverhampton, pays his own expenses, and is always here. Mr. Bentley and Mr. York do the same, and as to the office work it is done in a most efficient way for a very moderate amount.

Mr. WILDE: I think the London office expenses are very moderate. (Hear.)

The CHAIRMAN: The amount of work that has to be attended to outside the routine business is a very heavy task, for we have a list of 700 shareholders. This is not one mine, but a group of mines. Put them together and they constitute perhaps the largest group of lead mines in the country, taking the machinery and everything together. With regard to the humble individual who addresses you—your managing director—the arrangement made with him when he took office was that he should be paid the amount charged. I have lent the company money for the last 15 or 18 months, and not charged one penny for interest. The amount does not pay the postage, the telegrams, and the other incidentals which this company costs me each year. Some of the shareholders present have visited the mines, and they will realise something of the duties which devolve upon the management to keep them going. The Chairman then went through the items in the accounts *seriatim*, showing how the expenses had been increased in consequence of the apathy of the shareholders in not subscribing for the preference shares. (Hear, hear.)

Mr. WILDE said that the expenditure was a very good deal, but he must reprove the shareholders, and especially some of them, with not having properly supported the board at the present crisis. (Hear, hear.)

The motion was then unanimously passed.

A SHAREHOLDER asked whether the price of lead had gone down because the demand was insufficient, or because the price was in excess?—The CHAIRMAN said that a great many of the English, German, and Spanish mines were stopping. In Wales three or four of the leading mines could not pay dividends at present prices, and a similar remark applied to the mines in the North of England. All the cessation of work must have an effect on the produce. Trade had been bad and the building trade had been so in a special manner. He had now to read a letter received from the agents of the lords with respect to the dues.

This letter was read in *extenso*, and set forth that the lords were willing to meet the company in a friendly way. They were furthermore willing to do all they could to render assistance within reason. Permission was given pumping at Bog Mine would be granted upon the terms stated in the draft memorandum subject to any modifications which might be introduced. It would be better to treat this mine separately, as separate negotiations had commenced respecting it. As regards Tankerville and Pennerley, the lessors (the letter went on to say) were willing to accede to the company's application to suspend the payment of royalty until the end of the present year, provided that the royalty due and not paid up to June 24 were paid forthwith, and all the lessors' costs.

The CHAIRMAN went on to say that he thought the tone of this letter satisfactory, and that Mr. How had met them in a very fair way; but he now turned to the shareholders and asked them, what were the directors to do? Were they to suspend the mines and let the water in until better times, or were they to subscribe further capital? They must have further capital to get to the junction of the lodes in Tankerville. The directors placed themselves in the hands of the shareholders. At the same time, he must remind them that since the present company had been formed upwards of 35,000l. worth of lead and blende had been raised and sold. Had there been anything like an average price for these minerals profits would have been distributed, and preference shares had been placed in their present position. They had magnificent machinery, and everything was in good order and of a substantial character. It was heart-rending and distressing that things should be brought to such a pass, and he ventured to think that no man in England connected with the lead trade felt this more keenly than he did.

In reply to questions by Mr. WILDE, it was stated that no royalty would be paid until they got to the junction of the lodes in the Tankerville Mine.

Mr. ARTHUR WATSON, in the course of a lengthened address said: You have our full report upon the present position of the mines, and this has given you all the points I could possibly deal with in an address. I can only say to the meeting what I said this morning to the directors, that if you stop the Bog engine we shall be able to make both ends meet there, but that unless the shareholders take up the preference shares and supply working capital we shall have to work Tankerville and Pennerley for some time at a loss—that is, assuming that the present price of lead continues. There are some points in Tankerville of which I can speak positively, as for example in the north lode, where I believe there are thousands of tons of lead, from the 220 up to the 70 fms. levels. I am quite sure expenditure here would be most advisable, but the directors complain of the costs, and the shareholders are dissatisfied because they have no dividends, so that it becomes very hard for me. (Hear, hear.) We shall be able to make Bog pay if we stop the pumping-engine. That is my opinion as a practical man.

The CHAIRMAN: You say it is a pity that it should stop.—Capt. WATERS: Yes, and my report states so too. Unless capital is found to sink Tankerville's engine-shaft to the junction (and I have calculated that it will take from 8 to 10 fathoms to get to the junction, and we calculate on accomplishing that in about six months from the time we start); when that is done I believe we shall be in a very different position from what we are now. We have sunk the shaft 13 fms., and driven a cross-cut to the vein. We cut the lode in 9 ft. driving showing the two lodes were coming in junction faster than we calculated. We could not sink the shaft further until we had driven, but have now a vein from the 220 to 244. The vein was indisputable to ventilate the bottom of the mine. We have the mine in the bottom splendidly ventilated, and all that sections of ore ground open for stopping. We are now preparing to deepen the shaft to the junction, but we cannot accomplish the work unless you find the money for us to do it, and the shareholders come forward at once and subscribe for the remaining capital.

Mr. WILDE: How much will it cost?—Capt. WATERS: Judging from past expenditure it will cost about 20l. a fathom for sinking.

The CHAIRMAN (to Capt. Waters): If we had the remaining amount of capital (£8000), would that be sufficient to pay the debts of the company and complete the shaft to the junction, and drive out the lode, and do all other necessary work?—Capt. WATERS: Yes, that would be sufficient.

The CHAIRMAN: We should not require all the money at once. It could be done by easy instalments over a period of (say) eight to 12 months.

Mr. STEWART moved the re-election of Mr. York as a director.—Mr. TROT. WILSON seconded the motion, which was carried.

Several shareholders expressed their intention to take their full quota of the preference shares.

Mr. WILDE proposed that this meeting having heard the explanation of the managers desire to impress upon the absent shareholders the urgent necessity of subscribing for the remaining £288 10 per cent. preference shares, and the directors be requested to send out a copy of these proceedings to each of the shareholders asking them to subscribe conditionally upon not less than 6000l. worth of shares being paid up.

Mr. F. R. WILSON said that when he visited the mines in company with Mr. Watson last week he was much impressed with the state of the mines. He had never seen richer lode ore coming from Bog or Pennerley than he did on the occasion of this visit. Unless the shareholders subscribed this money the property was utterly valueless. It was absurd to suppose that it would collapse, for other parties would work it, and so reap the benefit of the outlay made by this company.—Col. CORNACK seconded the motion, which was carried *unanimously*.

Mr. H. C. STEWART bore testimony to the unremitting attention given to the affairs of the company by all concerned. His duties as auditor caused his frequent attendance at the office, and he was thus enabled to appreciate better than other shareholders the services which had been rendered by the Chairman and directors. He thought the thanks of the meeting were due to them for the advances they had personally made from time to time when the company were pressed for funds, and for the guarantee they had given the bankers, which had enabled the loan of 4000l. to be obtained. He then moved a resolution to the above effect, and confirming the action of the board in borrowing 4000l. from the bankers.

This was seconded by Mr. WOOLDRIDGE, and carried unanimously.

The CHAIRMAN, in acknowledging the vote on behalf of himself and colleagues, wished to impress on each shareholder the necessity of informing the directors as early as possible what number of the preference shares he would be prepared to subscribe for.

Mr. HENRY WILSON (a director) pointed out that the shareholders now had the issue very clearly before them. The recognition of the services the board had already rendered, and the good feeling which had been manifested throughout the meeting, were no doubt very gratifying; but something more was necessary. If the works were to be continued the shareholders must take their share of the responsibility, and not leave the burden, as heretofore, on the shoulders of the directors.

A hearty vote of thanks to the Chairman, proposed by Mr. MARVIN, and seconded by Mr. THOMAS WILSON, terminated the proceedings, which were throughout of a most harmonious nature.

DRAKEWALLS UNITED TIN AND COPPER MINES.

The ordinary general meeting of shareholders was held at the offices, Austin Friars, on Thursday,

The Right Hon. Lord CLAUD HAMILTON in the chair.

Mr. W. A. HAY (the secretary) read the notice convening the meeting. The report of the directors and of Mr. Moses Bawden (the manager) were taken as read.

The CHAIRMAN said: Gentlemen, I shall not trouble you with many remarks, because we have gone very fully into these subjects in the report, and you have all probably read it, and especially that portion of it which emanates from Mr. Bawden, our local manager, who directs the works. He will be able to give you the most accurate information, and to answer any questions which any gentleman here present may wish to ask with regard to the progress made. Many persons may naturally wish that the development of the mine had proceeded more rapidly, but it has been impossible to do so with safety and with economy. We have been making very steady progress. We have had no incident since we last met of a discouraging nature; on the contrary, the progress has been satisfactory.

Mr. Bawden said: A very large quantity of lead work, all of which is being done, is now being done, and is leading to a fuller development, so as to enable the mine to be laid open in a satisfactory manner. The only drawback we have had, which has rather prevented the output being as large as we anticipated, was a run or slip of a large mass of material in the deep adit. This was the result of the failure, I suppose, of the old timber, owing to the great superincumbent weight which pressed down upon it. There were two accidents of this kind; but, luckily, neither was attended with any personal injury. This is a circumstance to be thankful for, in the position of the slip many of the labourers might have been seriously injured. If you look at Mr. Bawden's report, you will see that in some instances there have been more difficulties than he anticipated. However, we have now reached to the 90 fms. level, and we have had put up on the wall of this room a complete sketch of the underground workings, from which Mr. Bawden will be able to point out to you the progress which has been made since we met last, and I think you will all be satisfied with the steady and sound way in which the work has been carried on.

When we got down to the plunger we found—and it was natural that we should—that it was not in very efficient working order. It had not been exposed for some eight years, so that we could not expect to find it in very good working order. Some of the chambers were very rotten and gave way, for they had been in the mine for 40 years subject to the action of water. Of course a considerable expense has been necessary to render these passages safe, and a good deal of retimbering has been required. All this has been going on steadily, and so far it has involved an outlay of 1200l. We have cleared and secured the 80 for nearly 100 fms., the operation being nearly completed within the last few weeks. The work executed is clearly a fourth in these reports, and Mr. Bawden will be able to enlarge upon them. We hope that within about the next three months we shall have reached some substantial pecuniary advantage. The run I have alluded to closing the deep adit rendered it necessary to run a level parallel to it for about 80 ft. That was a very extensive operation, and embarrassed our working for a considerable time. It is fortunate that the run has done no damage to the deep adit so far as we can see, and it is not anticipated there will be any further run. Mr. Bawden will, I believe, be able to satisfy you that that is not a danger we need at all apprehend. You are all aware that during a recent period the prices of minerals had been very unfavourable. The whole of Cornwall, and indeed the greater part of the country, had been suffering from the same thing; whether for tin, copper, or lead prices had not been of a remunerative character, and we have suffered in common with other producers of those metals. We, however, expect to be able to increase our output. We are at present raising about 11 tons of tin a month; but we hope soon to be able to return considerably more than that. The main part of our work is done by tributaries, and I am happy to say that the mine enjoys a very good reputation. We have been able to considerably increase number of tributaries, for the men are very well satisfied with the prospect the mine offers. Last year we had only 13 men on tribute; we have now 39, and we expect in a month or so to add 12 more, making 51 in all, and as the terms on which they are working are satisfactory to both parties, I think we may look for good results. As this is the half-yearly meeting there are no accounts to present, nor have I any resolution to submit; but later on we have a special matter to discuss. In the meantime we shall be happy to give you further information or explanation on any point which you may wish to raise. I can supplement my report very much. The Chairman has told you that we are progressing favourably, and that we hope to increase our returns. Last year we had been laying open ground which will now be available for making returns from. I have not so stated in my report, but I find that we have laid open about 235 fms. of ground during the past 10 months, and we consider that satisfactory progress, as our ground will average about the same number of pounds of tin to the ton of stuff throughout. Ours is not one big lode, but we have a lot of small branches, extending to an aggregate of 6 or 7 ft., all containing more or less tin. We have to treat the whole of the stuff coming from these branches. We have I may say drained the mine from the deep adit down to the 90. In the branches between the 80 and the 90 the men readily took pitches on tribute at 10s. in 17, which is a very favourable circumstance indeed. I may say that they would not have accepted those terms but for permission to work for two months afterwards on solid ground. We have not yet sold any tin from their work there, but we hope to do so next time. Next month I hope to return 12 tons of tin, and I believe that a very short time will be able to meet costs, even at the present price. Of course if our tin had kept at 67½, instead of dropping to 52½, we should have had a difference in our receipts of 1800l.; but, of course, I cannot control the tin market. I can lay open the mine I think as advantageously as anybody, for I know the property thoroughly, and I feel assured that if the course we are now pursuing is carried on for a few months longer we shall be in a paying state, for Drakewalls is one of the few mines that can be worked at a profit with tin at the present price—that is, when the necessary works of development are carried out. Mr. Bawden pointed out the course of the operations by means of a plan of the workings, and added that if the mine were to stop now the amount of liabilities not charged up would be under 100l. (Hear, hear.) The accounts could not be charged up closer than they were. Of course the run had increased the costs, while it had to some extent reduced the returns; but there was no further danger to be apprehended. He hoped that the shareholders would go down and see the property for themselves, for he felt sure they would agree with him that the money spent had been legitimately and economically spent, and that the permanent interests of the company had been properly studied.

Mr. PETER WATSON said that the slide had involved an additional expense of 400l. besides the delay, which meant money.

Mr. HENDERSON: It is probable that we shall lay open any richer ground?—Mr. BAWDEN: It is possible. Most of the ground is of this character in the south lode. In the old lode there were some very good bunches of tin, and when we get down the branches will probably concentrate to a width of about 6 ft. When we have a more defined lode we shall probably reach some rich courses of tin. I think that the old lode will improve in quality as we go down; but for the next 12 or 18 months we shall have about the same produce—that is, 20 or 22 lbs. of tin to the ton of stuff. We can really work low class stuff to greater advantage than any mine in the country; indeed, with 14 lbs. to the ton, when the mine is laid open Drakewalls would pay. In reply to a further question he (Mr. Bawden) said: We cannot say anything about copper just yet. If we have money to spare I should advise you to drive out to the copper lodes; but not with copper at the present price. Drakewalls has been working more or less for over 300 years, but the deepest hole in it is only 103 fms. Hardly any work has been done below the 80, west of engine-shaft, and nothing below the 90 west of that shaft.

Mr. BAWDEN: What is the deepest point at present?—Mr. BAWDEN: We have a pitch from the 80 to the 90 fms.

The CHAIRMAN then, after further discussion, proposed, seconded by Admiral STODART, that the report by the directors be received and adopted, to which

an amendment was proposed and put to the meeting and lost, the original resolution being carried by a large majority.

A vote of thanks to the Chairman, directors, and officials closed the proceedings.

KILLALOE SLATE.—At the half-yearly meeting in Dublin, on Monday (Mr. W. Bredin, J.P., presiding) the report stated that the quarries promised well, but for the two months of the half-year which had elapsed since the closing of the accounts the production had been as much interfered with as it had been on the average of the six months ended June 30; and that although the directors hoped for and expected a profit on the half-year ended Dec. 31, that profit could not in the nature of things be very large. On the working of the half-year instead of there being a small profit, as anticipated, there is an adverse balance of 104, 3s. 11d. The quality of the slate-rock now being opened and wrought upon is excellent. There is an ample demand for all the leading sizes of slates produced, but prices remain unprofitably low. Owing to the large development of the Garrybeg quarries it has been deemed indispensable that the secretary's office should be established thereat. Consequently upon this there is a charge against capital for the half-year of 156l. 5s. 7d. The financial position of the company is satisfactory, there being at the period of the closing of the accounts a balance to the company's credit at its bankers of nearly 2000l. The undivided profits amount to 1334l. 9s. Out of this the directors recommend a dividend at the rate of 4 per cent. per annum, which will absorb 451l. 8s. 4d., leaving 1387l. 9s. 8d. to be carried forward to the credit of future dividends. Messrs. Bredin and Bolton, two of the directors, retire by rotation, but offer themselves for re-election, as do the auditors, Messrs. Comyn and Sutcliffe.—The Chairman, in reply to a shareholder, said the present quarry was an exceedingly good one, the quantity being great, and the quality and demand good. In reply to a shareholder, who asked whether they could not employ a larger number of hands to increase the output, the Chairman said that additional hands could not be had, as they were all leaving the country, sailing their little interests, and going to America and elsewhere. A dividend at the rate of 4 per cent. was declared, and the outgoing directors and retiring auditors having been re-elected, a vote of thanks to the Chairman terminated the proceedings.

EAST BOTALLACK.—At the four monthly meeting, on March 21, the accounts showed a debit balance of 262l. 18s. A call of 3s. 6d. per share was made. The tin sold, 5 tons 8 cwt., at an average of 50l. 17s. per ton, was from the adit and 10 fms. levels, average yield 85 lbs. tin to the ton of stuff. It was stated that the call would clear off all the debts, and test some new points in the property. It was resolved to apply for temporary remission of dues and rents. Capt. Thos. Trahair, in concluding a special report upon the property, says:—I still adhere to the opinion expressed in former reports, that a cross-cut should be put out south from the bottom of the engine-shaft on the old lode, or (say) 50 fms. deep, to intersect the two lodes known to be in that direction, and within a distance of 20 fms. from the present bottom of the shaft. As these were the points for which the mine was originally started I certainly think they should be proved at an early date. As our property is so extensive (nearly 300 acres), and includes the continuance of the famous Ballewidden lodes, I would recommend the committee to test their value (at the intersection) by the sinking of a small shaft to the north-east of our present operations, and putting out a cross-cut, which can be done for a small sum. This is in my mind one of the best points in our property.

LINARES LEAD MINING COMPANY.

The report of the directors prepared for presentation at the meeting on Thursday next states that the operations carried on at the mines for the half-year ended Dec. 31 have resulted in a profit of 2148l. 11s. 8d. This is less than that shown at the last general meeting, but considering the lower price of lead which has prevailed the profit will no doubt be regarded as satisfactory. The productiveness of the mines has in no way diminished, and the report of the superintendent and mining agents shows that the reserves of discovered ore are again estimated at 500 tons, although a good rate of extraction of ore was maintained during the half-year. At the Pozo Ancho Mine Peil's shaft is now being sunk from the 135 fms. level towards a 155, and judging from the favourable appearance of the lode in the bottom of the mine, it is hoped that the opening up of this additional 20 fms. of ground will largely increase the available resources of ore. A communication has now been received from Peil's and Warne's shafts by means of a long cross-cut; this will much reduce the cost of working, as Peil's engine will in future pump the water from both shafts.

There has been a decided improvement in the productiveness of some of the principal levels of the Quintero Mine since the last general meeting, and the superintendent and mining agents report that the prospects at this mine are highly satisfactory. The explorations at the Majada Honda Mine having proved that the lode is not sufficiently productive to be worked to advantage during the continuance of the present low price of lead, operations there will shortly be suspended.

Everything is going on steadily and well at the smelting-works. The carriage and shipping have also been conducted with the usual regularity. The balance at the credit of the profit and loss account on Dec. 31 was 2374l. 10s. 3d., out of which the directors declared a dividend of 3s. per share, just paid, 2250l., leaving a balance to carry forward of 1234l. 10s. 3d. The directors have with very great regret to report the death of Mr. Richard Taylor, the manager of the company, which occurred in December last. The directors have appointed Mr. John Taylor, of Messrs. John Taylor and Sons, to fill the vacancy.

FORTUNA COMPANY.

The report of the directors prepared for presentation at the meeting on Thursday next states that the past half-year has been a period of anxiety to the directors in consequence of the continuous decline which has taken place in the price of lead. The mines fortunately have yielded well during that period, and hence a profit has been made of 3953l. 12s. 10d. This is smaller to the extent of 848l. 15s. 3d. than the profit for the previous six months, but the falling off is much less than might have been expected. In realising this profit no diminution has occurred in the quantity of discovered ore in reserve. This is again reported to be 9700 tons, as shown by the accompanying reports from the superintendent and mining agents.

At the Canada Incoima Mine Lowndes' shaft is being sunk below the 100 on the course of the lode, and the more important levels at this mine are being rapidly extended. There is every probability, therefore, that the productive power of the mine will be maintained. The mine of Los Salidos continues to open out well, and the directors are now watching with interest the result of driving the 175 east of Taylor's engine-shaft, as this level will soon get under the point where the lode was productive in the upper levels.

Much valuable ore ground continues to be developed at the San Antonio Mine, but at San Francisco the regular exploratory work has been suspended, and the principal places in this mine are being worked by tributaries. This system of working has been adopted on a more extended scale at all of the company's mines during the half-year, and it has been attended with favourable results. The report of Mr. Charles Tonkin on the smelting operations furnishes the customary details in regard to the quantity and quality of the ore treated, and the produce obtained. The quantity smelted was much larger than for the previous six months, but the other details of the report do not call for special comment. The audited accounts show that the balance at the credit of the profit and loss account on Dec. 31 was 4200l. 12s. 10d., out of which a dividend of 3s. 2d. per share has been declared, and just paid, 3584l. 6s. 8d.; and there has been placed to reserve fund 200l. = 4158l. 8s. 8d.; the balance to be carried forward being 421l. 7s. 2d. The office of manager rendered vacant by the lamented death of Mr. Richard Taylor has been filled by the appointment of Mr. John Taylor, of Messrs. John Taylor and Sons. Mr. Richard Taylor, with his brother the late Mr. John Taylor, filled the office of manager from the very commencement of the undertaking, and his advice and counsel were always greatly appreciated by the board.

ALAMILLOS COMPANY.

The report of the directors prepared for presentation at the meeting on Thursday next states that a profit of 3618l. 18s. 2d. has been made on the past six months' operations. The amount as might have been anticipated is less than that shown on the previous half-year's account, seeing that lead has fallen so considerably in price, but the produce from the mines has been good, and the reserves of ore have been maintained, and hence the company is in a favourable position to reap the benefit of better prices. The method of working some portions of the mines upon tribute has been continued, and has been attended with favourable results.

In the regular working of the mines San Victor's engine-shaft is about to be sunk towards a new level, and as the present deepest level at the shaft, the 80 fms., has been driven through a lode which has been almost uniformly rich during the past half-year, there is reason to hope that the 90 when reached will also be found productive. Mr. Shaw's report on the smelting and dis-silvering operations furnishes full particulars in regard to the results obtained during the past six months. These do not call for special remark, but it is probable that the cost of working will be somewhat reduced during the present half-year, as the supply of coal has been contracted for on more favourable terms than heretofore.

The balance-sheet shows that the amount standing to the credit of the profit and loss account on Dec. 31 was 3789l. 4s. 4d., out of which the directors have declared a dividend of 2s. per share, just paid, 3500l., and they have placed to the reserve fund 100l. = 3689l.; leaving a balance to be carried over of 189l. 4s. 4d. The death occurred in December last of Mr. Richard Taylor, who in conjunction with his brother, the late Mr. John Taylor, from the very commencement of the company, so ably filled the office of manager. The directors have appointed Mr. John Taylor, of Messrs. John Taylor and Sons, as his successor.

THE SPITZKOP (LYDENBURG) GOLD MINING COMPANY.

The directors state that Mr. J. A. Stone, of California, the mining engineer appointed by them to take the management of that property, sailed yesterday on the ss. Norham Castle for Durban, the mining tools, quicksilver, and part of the machinery having been sent on a previous steamer. From an examination and analysis of the ores obtained by Mr. Pascoe, M.E., during his examination of the property, and brought home by him, Mr. Stone has formed, it is understood, a very favourable opinion of the prospects of immediate returns being obtained.

INTERNATIONAL HEALTH EXHIBITION, LONDON.—The Exhibition will be opened by the President, his Royal Highness the Prince of Wales, on Thursday, May 8, at 3 P.M.

tion of sinking it. I am following the footwall in sinking No. 2 winze, which is in country resting on the footwall with quartz above. I hope to continue the

INDIAN CONSOLIDATED, March 2. Superintendent's Report: In submitting my report for the month of February I have to refer to the very important strike made in No. 2 adit.—Grove Section: In my last month's report I stated that the contractor was very fortunate in cutting a slide which carried him to what appears to be the footwall of a reef. From the footwall we cut into quartz of a white and valueless appearance, which we followed for some distance, and on the night of the 16th we came to a gap in the reef, and then cut a fresh vein of quartz, which was a continuation of the reef. The quartz is resembling the quartz we are mining in the upper workings. Up to this date I was very doubtful of this being the reef wrought in the upper level, but from the similarity of the stone we are without doubt on the reef we were in search of. This will place us considerably in advance of the time I anticipated it would take to cut the reef and connect the upper with the lower workings. The following is a summary, &c., of the work done.—Grove Section: No. 1 Level: In my last month's report I stated that the arrangement of the quartz in the forebore, which was then about 3 ft. thick. I have now reported that this width is reduced to 18 in., although the reef from wall to wall is about 8 ft. wide, with 4½ feet of reef gneiss and the quartz referred to. This may be a gneissic intrusion similar to one formerly driven through, and on extending the level further we may again come into a stronger body of quartz. Total distance driven from No. 1 adit 202 ft.—Underhand Stopes: Very little quartz has been driven in this level, the only quartz being in the stope, our work being chiefly confined to breaking up the conglomerate and leaving the quartz in place, embedding the ground which has been mined as close as convenient to the face, and now waiting to drive down the north end of the stope, and intend to drive through to No. 3 winze, which will leave backs to be easily stoped when the monsoon sets in, and during that time increase our output. I am cleaning out No. 1 winze with the intent

ST. JOHN DEL REY.—Telegram from Morro Velho (and United States): Pro-

THE COMPOUND ENGINE VIEWED IN ITS ECONOMICAL

An elaborate paper on this subject, by Mr. R. L. WEIGHTON, was

On the motion of the PRESIDENT, a hearty vote of thanks was then awarded to Mr. Weighton for his valuable paper.

Wednesday under this title is well and carefully edited, embellished with admirably executed illustrations, and furnishes information

PROVINCIAL STOCK AND SHARE MARKETS.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine share-dealer, Redruth (March 27), writes:—Dolcoath has almost entirely monopolised dealers' attention in our market this week, and price has risen 4. East Pools advanced 2 without much dealing. To-day Dolcoath, East Pool, South Frances, Wheal Agar, and Wheal Bassett close firm. Subjoined are the closing quotations:—Carn Brea, 2½ to 2½; Dolcoath, 10 to 12; Dolcoath, 11½ to 12½; East Pool, 40½ to 41½; Killfret, 5½ to 7½; New Cook's Kitchen, 1 to 1½; New Kitchen, 1½ to 1½; South Condurrow, 8½ to 9; South Crofty, 2½ to 2½; South Frances, 8 to 8½; Tincroft, 3½ to 3½; West Bassett, 2½ to 2½; West Frances, 7½ to 8½; West Killy, 12½ to 12½; West Polbreen, ½ to 1; West Poldice, ½ to ½; West Seton, 3½ to 4½; Wheal Agar, 12½ to 13½; Wheal Bassett, 3 to 3½; Wheal Grenville, 5 to 5½; Wheal Killy, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, 5 to 5½; Polbreen, 1½ to 1½; Trevaunance, 2 to 2½; North Bury, 2½ to 2½.

—Messrs. ANNOTT and WICKETT, stock and share brokers, Redruth (March 27), write:—A good business has been done this week in East Pools and Dolcoaths, buyers have predominated, and prices close at a material advance. West Frances, South Frances, West Killy, and Wheal Agar have been in request, but sellers are shy. Closing quotations herewith:—Camborne Vean, ½ to ¾; Carn Brea, 2½ to 2½; Cook's Kitchen, 10 to 11; Dolcoath, 70 to 72; East Blue Hills, 3½ to 5½; East Pool, 40½ to 41½; Killfret, 5½ to 7½; New Cook's Kitchen, 1 to 1½; North Bury, 2½ to 2½; North Crofty, 2 to 2½; South Frances, 8 to 8½; Tincroft, 3½ to 3½; West Bassett, 2½ to 2½; West Killy, 12½ to 12½; West Poldice, ½ to 1; West Seton, 3½ to 4½; Wheal Agar, 12½ to 13½; Wheal Bassett, 3 to 3½; Wheal Grenville, 5 to 5½; Wheal Killy, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, 5 to 5½; Polbreen, 1½ to 1½; Trevaunance, 2 to 2½; North Bury, 2½ to 2½.

—Mr. M. W. BAWDEN, Liskeard (March 27), writes:—The mining market presents a steady improvement with a greater degree of firmness than has been experienced for a considerable time past, holders of stock evincing more confidence in the future of tin. At New South Caradon meeting held on the mine yesterday a call of 1s. per 10,000th share was made. Subjoined are the closing quotations:—Anderson United, ¾ to ¾; Bedford United, 1½ to 1½; Carn Brea, 2½ to 2½; Cook's Kitchen, 10½ to 11; Dolcoath, 68½ to 69; Devon Consols, 3½ to 3½; East Caradon, ½ to ½; East Pool, 39½ to 40; Glasgow Caradon, ¾ to ¾; Gunnislake (Clitters), 7½ to 8; Hingston Down, 2½ to 2½; Killfret, 5½ to 7½; Marke Valley, ¾ to ¾; Old Gunnislake, ¾ to ¾; Old Shepherd, 1½ to 1½; Phoenix United, 1½ to 1½; Prince of Wales, ¾ to ¾; South Caradon (Limited) fully paid, ¾ to 1; South Condurrow, 8½ to 9; St. Just United, 4 to 4½; South Crofty, 2½ to 2½; South Devon United, ¾ to ¾; South Frances, 7½ to 8; Tincroft, 3½ to 3½; West Bassett, 2½ to 2½; West Caradon, ¾ to ¾; West Frances, 7½ to 8; West Killy, 12½ to 12½; West Poldice, ½ to 1; West Seton, 3½ to 4½; Wheal Agar, 12½ to 13½; Wheal Bassett, 3 to 3½; Wheal Grenville, 5 to 5½; Wheal Killy, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, 5 to 5½; Wheal Jane, 5½ to 6½; Wheal Uny, ¾ to ¾.

—Mr. JOHN CARTER, mine sharedealer, Camborne (March 27), writes:—In the share market Dolcoaths, South Frances, and East Pools are chiefly in favour, and prices have advanced. Other shares remain dull. Subjoined are the closing quotations:—Carn Brea, 2½ to 2½; Cook's Kitchen, 10½ to 11½; Dolcoath, 70 to 72; East Pool, 40 to 41; Killfret, 5½ to 10½; New Cook's Kitchen, 1 to 1½; New Killy, 1½ to 1½; South Condurrow, 8½ to 8½; South Crofty, 2½ to 2½; South Frances, 7½ to 8; Tincroft, 3½ to 3½; West Bassett, 2½ to 2½; West Frances, 7½ to 8; West Killy, 12½ to 12½; West Poldice, ½ to 1; West Seton, 3½ to 4½; Wheal Agar, 12½ to 13½; Wheal Bassett, 3 to 3½; Wheal Grenville, 5 to 5½; Wheal Killy, ¾ to ¾; Wheal Uny, ¾ to ¾; Wheal Coates, 5 to 5½; Wheal Peavor, 1 to 1½.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, share-brokers, Queen's Chambers, Market-street (March 27), write:—Throughout the week the tone all round the markets has been buoyant, money continuing cheap, and some expectation of the Bank rate being again reduced, having a share in the upward tendency. Prices have further been strengthened by stock being "short" at the account concluded to-day, and this, with the continuance of fine weather and some good traffic returns, has resulted in putting prices up in most cases, home railways all participating more or less in the advance. Foreign funds, with slight exception, have moved in the same direction. Egyptians have changed but fractionally, and are a little irregular, the United being higher, whilst the Preference are easier. Daira Sanieh showing no change on the week. Higher: Egyptian United, ¾ to ¾; Russian, ¾ to ¾; Spanish, ¾ to ¾; and Mexican, Three per cent., ¾ to ¾; Lower: Persian, ¾ to ¾; and Egyptian, Preference, ¾ to ¾. As usual, come in for some wide fluctuations; but the balance of rise and fall for the week is favourable comparison of prices, showing them at 2½ up since last Thursday. The traffic return, though a decrease of 640,000, contributed to the advance figures, having gone better since its announcement. Notwithstanding the occurrence of the fortnightly settlement, the amount of business done in miscellaneous investments reaches a good total, and taken all together prices realised show a generally steady tone to pervade the markets for the several classes comprised. The feature of the week appears to be the improvement, though slight, in the business doing in coal, iron, and mining shares, which is in excess of many recently past weeks.

BANKS keep good, with a moderate business doing. Higher: National Provincial, New, ½; Lancashire and Yorkshire, ¾ to ¾; Bank of Liverpool, ¾; Oldham Joint-Stock, ½ to ¾; and Manchester and Salford, ½. Lower: Manchester and County, ¾, and Union of Manchester ½. Consolidated, after moving a turn lower, have recovered, and sellers' price now shows ½ advance. Insurance shares have changed hands to a moderate extent, but prices are irregular, the balance of variations being slightly adverse, although the alterations are in no case important on either hand. Higher: Lancashire, ¾ to ¾; Liverpool and London, and Globe, ¾ to ¾; and British and Foreign Marine, ¾ to ¾. Lower: Royal (Liverpool), ¾; Thames and Mersey, ½ to ¾; Alliance Marine, ¾; and Maritime, ½.

COAL, IRON, &c., AND MINING.—More doing. Alterations in prices contradictory. The only sensational changes are a rise in Earle's Shipbuilding, and a fall in Sharp Stewart's. Higher: Earle's Shipbuilding, 4½ to 4½; Earle's Iron, ¾; Great Laxey Lead, ¾; Laxey and Tondra, Ordinary, ¾; ditto, Pref., ¾ to ¾; and Tharais Sulphur, &c., ¾. Lower: Sharp Stewart's, 2; Asbury's, ¾; Rio Pinto, ¾ to ¾; Edow Vale Steel, &c., ¾ to ¾; Tees-side Iron, ½ to ½.

COTTON SPINNING, &c.—After continuing strong up to Tuesday last the market has relaxed, and tone is now barely steady. TELEGRAPHs hardly anything doing; prices better where changed, except in Anglo ordinary, which are down ½. TELEPHONEs quiet; no change except a rise of ½ in United. MISCELLANEOUS dull, and a general rise in Sugar, Canal of 1, and of ½ to ¾ in Rylands, there is no alteration in prices worth naming. —RAILWAYS. The abundance of money, and prospect of further reduction in Bank rate (which, however, is not realised) has acted favourably on rails, particularly the "heavy" and southern lines; some good traffic, fine weather, and scarcity of stock also helping values. Canadians, with big backwardations, and a traffic (total decrease 642,000) better than expectations, have rallied from very low figures; but best points of recovery are not maintained. Americans have suffered on reduction of freights, which have got down to the verge of non-paying figures, and this must seriously affect coming reports of earnings. This will probably encourage "bears" to another onslaught, so that the prospect is not encouraging. The Erie Company show a decrease of earnings for January compared with last year of \$130,000, and Pennsylvania for February a decrease of over \$212,000, on lines east of Pittsburgh, and for lines west for the two months a falling off of nearly \$280,000. If this is the case on good lines poorer ones must be in an unfortunate position.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker (March 27), writes:—During the past week business has been quiet, but prices are steady owing to the favourable weather and the easy state of the money market. The state of trade is unaltered, although the financial atmosphere is clearer after recent failures. Prices in most cases are very low, but stimulus is still wanting to bring about a recovery. Transactions are now being entered into for the new account (April 9).

In shares of coal, iron, and steel companies the principal alteration is the decline in Macbeth & Co. Cardiff and Swansea are at 50s.; Chapel House, 6s.; Llynvi and Tondra Ordinary, 70s.; ditto (Preference), 52s. 6d.; New Sharlston (Preference), 6½; and Wigan, 32 to 34.

In shares of foreign copper concerns prices are steady. Tharais have been sold from 6½ to 6½. Arizona has declined from 15s. 9d. to 11s. 6d. Canada Copper about 7s.; Corporation of South Australia, 2s. 6d. to 5s.; and York Peninsula, 7s. to 4s.

In shares of home mines there has been less business doing. D'Eschey Mountain is making good progress, and when the shaft is completed they expect to make good profits. The agent's report of Leadhills states they require nothing more now to make it a success but a better price for pig-lead. Craignant Bitch offered. Anderson are at 12s. 6d. to 15s.; Camborne Vean, 5s. to 7s.; Devon Consols, 60s. to 65s.; East Craven Moor, 1s. 3d.; East Van, 4s. to 6s.; Great Laxey, 10½ to 11; Halkyn, 6s. 3d. prem.; Killfret, 5s. to 7s.; Mounts Bays, 4s. to 6s.; New Terras, 7s. 6d. to 10s.; North Blue Hills, 1s. 3d.; Old Shepherd, 19s. to 21s.; Phoenix United, 17s. 6d. to 22s. 6d.; Polbreen, 3s. 6d.; Sordridge, 5d. to 6d.; Knapgarth, 4s. to 5s.; West Penrith, 4s. to 5s.; Tregentree, 1s. 2d. to 2d. 9d.; Zamar, 4s. to 5s.; West Ormrod, 2s.; Westmorland Consols, 22s. 6d.; West Croft, 1s. 6d. to 2s. 6d.; Wheal Crebor, 30s. to 35s.; and Wheal Grenville, 5 to 5½.

In shares of gold and silver mines prices are steady. United Mexicana have improved from 9½ to about 11, on satisfactory reports from the mines. Richmonds lower, at 62s. 6d. Montana fluctuated between 65s. and 70s. Balkis, 2s. to 20s.; California, 12s. 6d. to 13s. 6d.; Cankim Bamoo, 6s. to 8s.; Frontino, 19s. to 21s.; Gold Coast, 3s. 3d.; Gold Hills, 1s. 3d.; Guinea Coast, 1s. 6d. to 2s. 6d.; Knapgarth, 4s. to 5s.; Kollinor, 6s. to 7s.; Lisbon-Berlyn, 1s. 6d. to 2s.; Orizaba, 18s. to 19s.; Silver Peak, 7½d.; Tacuahu, 2s. 6d.; Tecoma, 2s.; and Victoria, 12s. 6d. to 13s. 6d.

In shares of miscellaneous companies the principal business has been in Nobels, which improved from 20 to 23, and are now about 22; their dividend has been announced at 17½ per cent., which compares with 20 per cent. last year. Home Mines Trust, 14s. to 15s.; Lawes' Chemicals, 5 to 5½.

EDINBURGH.—Messrs. THOS. MILLER and SONS, stock and share brokers, Princes-street (March 26), write:—There has been an improved for home railways since last report. Most of the Scotch stocks are now quoted ex div. The market for Canadians has been very weak, and a heavy fall has taken place in Grand Trunk stocks. Americans also have given way. In bank stocks there has been a steady change. North British and Mercantile Insurance shares have been in demand,

and have risen from 26½ to 27. In oil shares Young's have risen from 10½ to 10½; Broxburn from 27 to 27½; Dalmeny have receded from 22½ to 22½; Lanark from 5½ to 5½. A large business has been done in Midlothian, which after many fluctuations stand at 8½, as against 8½ a week ago. Westfield have receded from 11½ to 10. Arisdon Copper have had another fall from 15s. 6d. to 12s. Fife Coal have gone from 10½ to 10, Mason and Barry from 12 to 11½.

IRISH MINING AND MISCELLANEOUS COMPANIES SHARE MARKET.

CORK.—Messrs. J. H. CARROLL and SONS, stock and share brokers, South Mall (March 27), write:—Markets were dull to-day. Great Southern changed hands at 115½ to 115½, and Midlands at 81½ to 81½. Great Northern, Wicklows, and Waterford and Limericks unaltered. Bandon unchanged. Bantry Extension shares buyers at 10 ex div. No change in Bank stock or Provincials. National were done at 24 9-16ths to 24½, and Hibernians at 25. Nothing done in Munsters. Alliance Gas shares remain 19, and Cork Gas 7½. Gouldings sellers at 9. Levys, 6½. Steamships wanted at 16½, and Packets offered at 11½. Lyons and Co. shares, fully paid, on sale at 6½, and the 4½ paid shares at 5½. Dalys unchanged. Cork Refreshment Room shares offered at 1, and Cork Commercial Buildings at 47. Brewery shares were asked for at 4, and the Debentures changed hands at 97. Lyons and Co. Debentures, 102. Harbour Board Debentures wanted at 102.

Mining Correspondence.

BRITISH MINES.

ANDERTON TIN.—W. J. Bowhay, March 28: We are pushing on with all possible energy. The lode in the 20 below adit, east of the cross-course, is holding good, and yielding very rich tinstuff for the stamps. In stopping this part we are taking down rocks of rich tin, more than a man can tumble, and sending up splendid stuff. On the west of the cross-course we are pushing on with all speed, but our progress is not so fast here as I should like owing to a hard floor of spar in the end. We are in 3 fms. going north, and I hope it will become easier as we get under the winze in the adit. Water is coming from the end, and I am well pleased with the prospects of improvement here. We are busy dressing tin, and I shall have a good parcel for the market in 10 days or a fortnight. All the machinery is working satisfactorily, and everything going well forward.

BEDFORD UNITED.—H. Trezize, March 28: The tribute pitches on the north and Bridge lodes maintain their value, and the several stopes throughout the mine are looking very well. McCullin's Shaft: We have not yet intersected the lode in the 75, but from indications we are evidently near the lode. In the 82 east and west the lode is very promising; each end is producing saving work for ore. I anticipate the sampling of ore on Friday to be about the same quantity as last month.

BWLCH UNITED.—W. Northey, March 27: To-day I have completed the timbering of the new shaft, and shall at once fix tackle and resume the sinking with full speed on a well-defined lead-producing lode, where we may reasonably expect a great discovery of silver-lead ore. The pumping machinery, &c., are all in good working order.

CASHWELL LEAD.—John Peart, March 22: The heading in copper hazel west end, near the drift forehead, contains fair ore; it is looking a little better this week in the top part, and more vein, is worth fully 1 ton of ore per fathom. The heading coming east in the above stratum continues much the same, in places good ore, and in places it is poor, but altogether is worth 1 ton of lead ore per fathom. The drift in copper hazel going west is looking well, the vein is 3 ft. wide, and well mixed with ore, and easy to work; is worth 3 tons of lead ore per fathom. The drift in copper hazel going east is improving; there is a little fluor-spar patting in the vein, and nice pieces of ore, but still very hard. The rise in slaty hazel is about the same as last reported. We have ceased to work this point for the present having put the men into copper hazel for a few months.

COLLACOMBE CONSOLS.—W. Skewis, March 27: The engine-shaft is going forward very satisfactorily; ground favourable, and of the very best possible description for the production of large quantities of copper ore. The western winze, in the 102, is cleaned up 5½ fms. The lode standing in the 102 is 2 ft. wide, and from which we have broken splendid stones of copper ore; when this winze is cleaned up to the 105 we shall have a fine piece of valuable ore ground to work upon. There is no particular change in the western or eastern ends of the 96. The lode in back of the 40 has much improved in the past week, and the tributaries are likely to do well. All the other portions of the works are going on in the usual way, and we are looking forward to increased sampling.

COED-Y-FEDW AND PANTY-BUARTH.—R. Prince, March 27: The 90 level maintains the value previously reported. The lode in the back is worth ¾ ton lead per fathom, and that in the 112 2½ tons; Trevaunant's string, ½ ton. In the 112 north driving we have been delayed, in consequence of having to alter and improve the level that has been extended to the Cefn Bechan lode; but in a day or two we shall be in full work, and good results may confidently be expected.

CWM DWYFOR AND BRYNARIAN (Brynarian Mine).—J. Davies, March 24: The lode in the level driving east from boundary cross-cut has improved for the last few feet. It contains a little copper and lead. We are driving on the south side of the lode.

DEERPARK.—T. Coking, March 26: The lode in the rise in the back of deep adit is improving; good stones of copper ore now being broken. I believe as I stated in my last report a good discovery of copper will be met with soon, as we have every indication of it.

D'ESCHY MOUNTAIN.—J. Roberts, W. Sandoe, March 26: In the rise at No. 6 we have got up about 8 ft. during the past month. The lode in that time has very much improved both in appearance and value, and is worth from ¾ ton to 1 ton to the fathom. The ground is also getting a little better for cutting, which will compensate for the distance, which makes it necessarily a little more spare. The shaft at No. 4 has been sunk 2 fms. 2 ft. 6 in., and at the present moment is 9 fms. 4 ft. 6 in. below the No. 4 level, and we calculate at the present rate of sinking and rising that we shall get a communication in a month from this time. The lode in bottom of the shaft is not looking quite so well as it has been, but there is still a mixture of lead through the lode. The shaft from surface, owing to the hardness of the ground, the quickness of the water, and the great depth to draw the stuff, has not made so much progress as formerly, but since the blasting of deep holes in the bottom the water is much less, and we hope that the sinking will be more expeditious, and we expect to get the communication opened in a short time. We are weighing off the blende to-day.

DEVON FRIENDSHIP.—F. R. W. Daw, W. Gill, March 27: The lode at the 42, east of Bennett's engine-shaft, is about 2 ft. 6 in. wide, and worth about 10¢ per fm. for arsenical blende and tin. All other points in the mine are yielding their usual quantities of arsenical blende and tin per fathom. We shall sample to-morrow about 22 tons of copper ore.

DEVON GREAT CONSOLS.—Isaac Richards, March 27: Wheal Emma, New South Lode: In the 205 fm. level the lode, 4 ft. of which being carried, is of a promising character, and yields a little good quality copper ore, and 3 tons of blende per fm. In the Railway shaft sinking below the 205 the ground is tolerable favourable for progress, and is congenial for the production of mineral. In the 205, west on the south part of the lode, the lode, part carrying from 2 to 3 ft. wide, is composed of capel and quartz with small quantities of blende and copper ore. In the 160 west the cross-course intersected and referred to in last report has been cut through, proving 4 ft. wide, and the drifage has been turned south for intersection of the lode, which in all probability will be met with in that direction. —Watson's: In the 112, west of the engine-shaft, the lode is 14 ft. wide, composed of very fine capel and quartz, with blende, peach, fluor, and 2 tons of copper and blende ore per fathom. All the other points of operation throughout the mines are without important alteration.

DEVON GREAT UNITED.—Isaac Richards, March 27: In the 120, east of Willeford's shaft, the lode is 5 ft. wide, of a very promising character, and yields a little good quality copper and blende ore. The distance driven during the past month is 3 ft. 6 in. In Pengelly's rise in the back of the 120, west of Willeford's shaft, the lode is from 3 to 4 ft. wide, and is now yielding 2 tons of good quality copper ore per fathom. From present indications a further improvement may fairly be expected. The distance driven during the past month is 1 fm. 1 ft. 9 in. In the winze sinking below the 104, west of Willeford's shaft, the lode is worth for length of winze, 3 ft. 6 in. of copper ore per fathom, and it has been equally productive for the whole depth sunk, 2 fms. 1 ft. 6 in., during the past month. There remain some 5 fms. of ground between these two last-named points of operations, and seeing that the lode at both points is productive, we have good grounds for calculating that it will continue equally productive for the whole distance yet unexplored. In the 60 fm. level, west of Watson's shaft, on the middle lode, the lode is 3 ft. wide, of a very promising character, and is yielding stones of copper and blende ore of excellent quality, and judging from present indications an improvement may be looked for in this level, which is being extended into the long unexplored range of promising ground. The distance driven during the past month is 1 fm. 1 ft.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, March 28: In the sinking of the shaft below the adit level the lode is being dressed during the past week, and consequently the value remains as last noticed—15½ per fathom. The three stopes now at work above the adit level are worth respectively 5½, 6½, and 7½ per fathom.

EAST LONG RAKE.—H. B. Vercoe, March 27: The lode in the 40 fm. level driving north is rather harder than it has been; it continues to produce good orestuff, and will doubtless further improve as we near the junction; I look forward to opening out a good mine in this direction. The lode in the 40 fm. level level produces occasional lumps of lead; ground hard, and progress consequently slow. We have a rich pile of lead stuff on the surface awaiting dressing operations.

EAST WHEAL ROSE.—W. Skewis, T. Doldge, R. Gill, March 25: Penrose engine is working well, and water being forked with fair speed. The 60 from Baynard's shaft is communicated with the engine-shaft on Middleton's lode; this has opened up a good piece of lead ground, and also ventilated the engine-shaft and the workings generally in this part of the mine. We have now a good piece of ground laid open for tribute, from which one pair of men alone in the last month returned nearly 3 tons of silver-lead ore. It is also gratifying to find that our samplings of lead ore are somewhat increasing, and for which we are getting a better price, and we are very confident that very much better results will follow when the bottom of the mine is reached. All the other machinery is in first-class working condition, and doing good duty.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, March 24: We have nothing very new to report this week. In sinking the engine-shaft the men are going on very well with their bargain, and hope to complete it to the 126 by the end of the month. If not before, we are pushing this with all speed, anxious to commence driving to the lodes. In the 114 west we have some very good stones of ore, better than we have seen for a long time. We do hope it will lead

to something good soon. The 90 west is suspended for the present, and the men put to stop in back of the level; these stopes are worth from 8½ to 10¢ per fm. We set our usual tribute pitches on Saturday last; there is very little change in the amount produced about the usual quantities of ore. All our machinery is in good working order, and all points of operation being pushed on with as little delay as possible.

GORSEDD AND MERLLEN.—W. T. Harris, March 27: In the 70 east the lode is 1½ ft. wide, and gradually improving, now worth 10 cwt. lead ore per fathom; its composition is really good. The pitch is also improving for lead, and the men working with increased energy. We have a parcel of lead ready for sale to-morrow, and also preparing a parcel of blende.

GREEN HURTH.—J. Polgase, March 26: The vein in the 44 and north is now worth 2 tons per fathom. No. 1 stope in the 44 and north is worth 2 tons per fathom. No. 2 stope in the 44 and north is worth ½ ton per fathom. No. 3 stope in the 44 and north is worth 3 tons per fathom. No. 4 stope in the 44 and north is worth 4 tons per fathom. Stope in back of Standage level is worth 3½ tons per fathom. The vein in 30, north of heave, has been during the week worth from 3 to 4 tons per fathom, now worth 2 tons per fathom, a very splendid lode. We have completed the 200 tons parcel of lead to-day. Dressing going on as usual.

HEALEYFIELD.—J. Trelease, March 21: The contractor will complete the driving of the cross-cut from the Whitwell shaft to the Derwent level this morning. It is driven back on the Fell-top limestone, and the gradient of the cross-cut is more than we calculated on, owing to having intersected several strong strings, which have thrown up the west cheek at every one met with. According to instructions I have set a contract to Mr. Mason to drive 5 fms. on a strong string, which is inclining towards the main vein. This string when cut in sinking will produce some good samples of galena ore, and is well worth trying before we get the pumping machinery, and resume sinking to the lead treasures below. The tribute pitches in the mine are without change. Dressing going on regularly.

HINGSTON DOWN.—T. Richards, March 28: In the 52, east of the engine-shaft, there is no material change; the lode is composed of capel, quartz, blende, &c., and a little copper ore intermixed. The south cross-cut towards the No. 2 level is extended 16½ ft., and fair progress continues to be made.

KIT HILL GREAT CONSOLS.—Isaac Richards, March 27: At the tunnel level ground continues favourable, and the distance driven during the past month is 9 fms. 3 ft. 6 in., making the total distance 254 fms. 1 ft. 2 in. In the north engine-shaft sinking below the 88, the lode is fully 6 ft. wide, composed of capel, quartz, peach, blende, prun, and a little tin ore, a most promising lode. The distance sunk during the past month is 2 fms. 1 ft. 3 in., making it 9 fms. 5 ft. 3 in. below the 88. In the 83 east and west the lode is from 4 to 5 ft. wide, also of a very promising character, and yielding a small quantity of tin ore. The distance driven during the past month is east 2 fms. 0 ft. 9 in., and west 2 fms. 0 ft. 3 in.

MELLANEAR.—John Gilbert, March 28: The ground in the 30 cross-cut, driving south of Gundry's shaft, continues to be very easy for exploring, and congenial for the production of copper ore. The ground in the 70 cross-cut, north of the main lode, west of shaft, is a little better for driving, mixed throughout with blende and blende, and letting out an increased quantity of water. The lode in the 100, west of Gundry's shaft on the main lode, is 6 ft. wide, and yielding 3 tons of copper ore per fathom, but the ground is not very well and troublesome for driving. The lode in the 110, east of shaft, on the main lode, is 4 ft. wide, yielding 3 tons of ore per fm., and presenting a very promising appearance. The lode in the 120, west of shaft, is 5 ft. wide, and yielding 2 tons of ore per fm., but there is more lode still standing in the south side of the level. The lode in the 120, east of shaft, is 4 ft. wide, yielding 2½ tons of ore per fm., and looking promising for further improvement. The rise in the back of the 110, west of Gundry's shaft, is 5 ft. wide, yielding 2 tons of copper ore per fm., and some saving work for tin. The rise in the back of the 120, west of shaft, is 4 ft. wide, and yielding 3 tons of ore per fm. Gundry's engine shaft to sink below the 120, is 4 ft. wide, and yielding 2½ tons of ore per fm. We also set 14 pitches to 3, men, at an average tribute of 9s. 1d.

MID-DEVON COPPER.—J. Neill, March 22: A Shaft: There is no perceptible abatement in influx of water, although I believe that the greatest limit has been reached, as I find the percolation through the sides of shaft gradually decreasing down. The speed of wheel, 5½ revolutions, is being maintained. The water is 9 ft. above the bottom of the shaft, and the water is 9 ft. above the bottom of the shaft. The shaftmen are engaged, nine men with rock-drill driving the 50 east towards the slide, and have progressed 1 fm. 5 ft. 6 in. this week; strata has not so much capel, and more garnet and chlorite mixed with it, with occasional small nests and patches of yellow ore, which promises well when slide has been intersected. The stope in the back of cross-cut north from 50 east, worked by four men and four boys, with occasional assistance from three men from A shaft, has no material change. In the highest point of stope the ground is easier, and the deposit of ore appears to be opening out, and am expecting it will improve. —Dressing-Floors: The parcel of ore sampled on 10th sold on 20 inst. for 4s. 3s. 6d. per ton.

MOUNT CARBIS.—W. Tregay, March 27: The water is still quick in the 60 north cross-cut, and there is no doubt that we are draining the great lode for a considerable length. The lode in bottom of the 50 is worth 20¢ per fathom. As yet there are only branches in the 50 north cross-cut. These branches are accompanied with a cross-branch. We have no doubt that the north lode is near. The lode in the 33 west, over the carbons, is worth 3¢ per fathom. Since last report (produce during the last fortnight) we have sold 3 tons 11 cwt. 2 qrs. 4 lbs. of black tin for 171s. 9s. 3d. No other change to report.

MOUNTS BAY CONSOLS.—W. Argall, T. Job, March 22: We have cleared the engine-shaft this week about 1 fm. 1 ft. 6 in., now down 16 fms. 4 ft. below the adit level, so that we hope soon to be at the top. In the bottom of the adit level we have set to sink winze to six men, at 12s. in the 11, tribute, worth 10¢ per fathom. There are two tributary pitches working in the bottom of the adit, at 13s. 4d. in the 11, and two in the back at 12s. in the 11. We are pushing forward to get at the 20, when we hope to have something good to report. We shall sell our usual parcel of tin in the coming week.

NEW CARADON.—N. Richards, March 26: Dawe's engine-shaft is drained to the 30, and the footways, &c., fixed from the 20 to this point. Here we found a small flat cut, but no levels driven. The ground about the shaft at this point is heavy, and a part of the men are employed securing the same, and a part are engaged clearing and securing the 25, and if the pitwork ordered is sent in this way, we hope to reach the 40 about the latter end of next week.

NEW TERRAS.—R. Esde, March 27: Having had fine weather during the past week we have made good progress with our surface works, and in about another week shall have the buddies in order, and also 16 self-acting slime-frames. The water in the engine-shaft has fallen off considerably, and now we have not a sufficient supply to work the stamps at night, but can only do so during the day. As soon as we communicate in the bottom cross-cut with the winze (and we hope to do this during the next week) we shall at once commence sinking the engine-shaft another 10 fms., when we shall doubtless get plenty of water for our 16 heads of stamps; but from the quantity of tinstuff we have it is very evident we shall at once require more stamping power, and then Mr. James intends fixing our hydraulic ram in the river at the bottom of the dressing-floors, which would bring up sufficient water to supply any number of heads. The first cost would be all, as it is self-acting. The more I consider the plan of laying out this mine the better I like it. The tinstuff from the great stope still continues about the same value, and the branches in the shallow adit are better if anything. We are pushing on with the deep adit, which will not only lay open an extensive run of rich tin ground but let off the surface water, so that when the ram is fixed we shall not have so much work for the pumps.

NEW WEST CARADON.—N. Richards, March 26: We have suspended the driving east on the branch, referred to last week, at the 38, the ground being harder, and the same men are gone back to push on the driving east on No. 3 lode, which is 20 in. wide, producing saving work, and has a very promising appearance. No. 6 lode, in which we are driving east at this level, is producing a little copper ore, but the ground is still better for driving through.

NORTH BLUE HILLS.—S. Bennetts, March 28: There is not much change to notice in the lode in the adit west end. A shallow adit shaft will be forthwith cleared up to lay open another tin lode a few fathoms north of the one now being driven on.

NORTH BUSY UNITED.—John James, March 27: The ground in the cross-cut at the 15, driving south from Vivian's shaft, is most congenial for mineral, and is now letting out water freely. We have about 2 fms. more to drive to intersect the first copper lode, which will be done with all dispatch. The lode in the 15 west is small and poor at present. The lode in the 15 east, driven by the cross-course; for the last 8 ft. driven the lode has produced some splendid stones of copper ore and tin, and I think when the lode gets away from the influence of the cross-course we shall have an improvement. In the rise in the back of this level the lode is 18 in. wide, producing good quality tinstone.

NORTH GREEN HURTH.—Jas. Polgase, March 20: There is nothing of importance in the deep cross-cut calling for remark. The vein in the south level from deep adit keeps its course very regularly. The adit level in the new property is much the same in appearance.

NORTH PENRITH.—S. Davy, Wm. Polkinghorne, March 27: Setting Report: Highburrow shaft to sink below the 150, by twelve men and four boys, at 30¢ per fathom; sunk last month 2 fms. The 150 to drive west, by six men, at 6¢ per fathom; lode at present disordered. The 150 east end, by six men, at 5¢ per fathom; lode 2½ ft. wide, producing occasional stones of tin.

OLD GUNNISLAKE.—W. Sk

30, about 15 fathoms east of Highburrow shaft, a cross-cut to drive to intersect the north lode, to six men, at 67. 10s. per fathom. The new lode in the 30 north-west has further improved since my report of March 17, and the lode east, which was disturbed by a cross branch, has again made a favourable change within the last day or two in that end. The tributors are preparing a parcel of tinstuff for sale.

PRINCE OF WALES.—S. Roberts, March 26: In the 102 east we have taken down the lode, which is 3 ft. wide, worth 5s. per fathom for tin, and producing some rich copper ore; we are again driving by its side. The lode in the 102 west is 3 ft. wide, worth 2 tons of copper ore, and fair stamping work for tin. In the 90 west the men have blasted down the main lode, and are now driving on the Silver lode, carrying 4½ ft. wide (no indication of north yet), composed principally of white iron, mangle, and friable spar, leaving the main lode, which is 3 ft. wide, producing tin and copper ore, worth 6s. per fathom, bending away before it in the south side. We think it will soon break through the Silver lode. All other points in operation unchanged since last reported.

ROMAN GRAVELS.—Arthur Waters and Son, March 27: The 125, south of new engine-shaft, is worth 30 cwt. of lead ore per fathom. The 110 south is worth 3 to 4 tons per fathom. The 95 south is worth 30 cwt. per fathom, and improving. The 80 south is worth 3 tons per fathom. The 80, north of old shaft, is worth 1 ton per fathom. The stopes generally are yielding their usual quantities of lead ore.

RUSSELL UNITED.—John Bray, March 27: The lode in Matthew's engine-shaft is full 4 ft. wide, of a very promising character, producing a little copper and mangle. The ground in cross-cut at Stephen's engine-shaft has become harder, with branches containing quartz, spotted with copper crossing the drive, which looks well for the lode when intersected.

SINGLAGE.—W. T. Harris, March 27: Waco Shaft: The 65 shaft has been extended 9½ yards, the ground is of the same conglomerate character as for some time past. The joint is 1 ft. wide, principally carbonate of lime, containing occasional stones of lead. The intersection of the Baley Gwyn lode under such favourable prospects cannot fail being successful, and this we are daily looking for. In referring to Sampson's shaft my object now the weather is favourable to resume operations, where I have no doubt early discoveries will be made in sinking; the ground is highly favourable. The machinery is in good condition and works well.

SOUTH CARADON.—Wm. George, March 26: Setting Report: Rule's Shaft: To drive the 210 east with the boring-machine by nine men, measured for the past month 7 fms. 4 ft. 6 in. The lode is 2½ ft. wide, composed of quartz, peach, and mangle, with good leaders of ore running through it. To drive the 180 east on north part of the lode by four men, at 10s. per fathom. This is producing a little ore, but not of high value. At Kittow's shaft men are now employed in fixing road for carrying man-engine rods, which will be urged on, and we expect got ready by the time the engine and connections are fixed. To drive the 150 east by six men, at 6s. per fathom. The ground has improved, and the lode—3 ft. wide—is producing saving work, but the end is not yet far enough east to take the dip of the ore in the levels over. To drive the 170 east from long winze by six men, at 4s. The lode is now 2 ft. wide; a good course of ore worth 3 tons per fathom. This augurs well for the ground intervening between the end and winze sunk to same depth about 15 fms. in advance. To drive the 160 east by two men, at 4s. 10s. The lode here will also yield 3 tons of ore per fathom, but being so far in advance the want of proper ventilation compels us to reduce the number of hands. One stope is set to four men in the bottom of this level, west of long winze, at 4s., yielding 2 tons of ore per fm.; and three stopes in the back to four men in each, at 3s., yielding respectively 2, 2½, and 2½ tons of ore per fathom. To drive the 150 east by six men, at 5s. per fathom. The lode is at present small, yielding saving work, but not of much value. To drive the 140 east by four men, at 4s. 15s., where the lode continues to yield 2½ tons of ore per fathom. To stop the back by six men, at 2s. 10s., yielding 2½ tons of ore per fathom. To drive the 123 east by four men at 10s. per fathom. The lode here has been disordered by small crossings during the past month, and troublesome for driving through, but the ground is now looking a little more favourable, and with a change we hope to get an improvement in the lode. To stop the back of this level by four men, at 2s. 10s., yielding 2½ tons of ore per fathom. To drive east from rise in back of the 110 by two men, at 3s. per fathom, yielding saving work. To drive the 60 west on the new lode by two men, at 4s. 10s. The lode here will also yield 3 tons of good quality ore, worth 3s. per fathom. To drive same level east on this lode by two men, at 6s. 10s., yielding 1 ton of ore, worth 10s. per fathom. There are 52 pitches set to 109 men, at tributes varying from 10s. to 13s. 4d. in 17. We have commenced to refix man-engine, which will be pushed on with all speed and set to work as quickly as possible.

SOUTH CONDURROW.—Wm. Rich, W. Williams, H. King, March 26: The lode in the back of the 95, east of King's, is worth 15s. per fathom. The 90 east is worth 6s. per fathom. The lode in the back of this level is worth 10s. per fathom. There is nothing new to report on in the 80, west of the Plantation shaft, nor in the 30 cross-cut north. The 70 end east is worth 7s. per fathom. The stope in the back is worth 10s. per fathom. The 60 east is worth 12s. per fathom. The stope behind the end is worth 15s. per fathom. The 50 end east is worth 12s. per fathom. The stope in the back is worth 12s. per fathom. The 40 end east is worth 10s. per fathom. The 30 end west is unproductive. The 20 end east is worth 7s. per fathom. Two stopes in the back are worth 10s. per fm. Good progress is being made in the 54 cross-cut, south of Marshall's shaft. The 65 end west is in a promising lode, it is letting out water freely, and is worth 7s. per fathom for tin. The stope in the back of the 78, east of Marshall's shaft, is worth 12s. per fathom. Good progress is being made in sinking the winze below the 78, but the lode is poor. The rise in the back of the 93 west is worth 5s. per fathom. The lode in the 93 end west is not quite so large as it was last week.

SOUTH DARENS.—J. Mitchell, March 27: The lode in the 130 east is strong, with a good mixture of copper; we expect it will soon improve for lead. The present value is 15 cwt. of silver-lead ore per fathom. The lode in the 130 west is wide and strong, with lead scattered throughout the whole width of the forebore; the present value is 1½ ton silver-lead ore per fathom. The stope east of winze in this level is worth 2 tons of silver-lead ore per fathom. No. 3 stope in the 123 east is worth 1½ ton silver-lead ore per fathom. We have let No. 2 stope in the 110 west to four men, at 3s. 17s. 6d. per fathom. The stope is worth 1½ ton silver-lead ore per fathom. We are very short of water, and have been obliged to work the engine all the week to assist in dressing.

SOUTH DEVON UNITED.—W. Hooper, March 27: The 120 west of Martin's shaft, has been driven during past month 3 fms. 1 ft.; reset to six men, at 6s. 10s. per fathom; driven during the past week 1 fm. 0 ft. 6 in. The lode is fully 5 ft. wide, producing mangle and copper ore, worth 12s. per fathom. The 120, east of Martin's shaft, has been driven during the past month 2 fms. 4 ft. 4 in.; reset to six men at 6s. 10s. per fm.; driven during the past week 5 ft. 6 in. The lode at present is disordered in consequence of a small crossing coming across the end obliquely, and has thrown the lode further north. This we shall prove by another week when particulars shall be sent you in next report. The adit level, west of old sump shaft, has been driven during the past month 1 fm. 2 ft. Reset to two men, at 4s. per fathom. The lode is 5 ft. wide, of a most promising nature for the depth. We are busy engaged dressing tributors' ore for next sampling. The men are working well and earning fair wages, which we consider will be an inducement to others.

SOUTH PENSTHUL.—Stephen Davey, March 27: Setting Report: The engine shaft to sink below the 118, by six men, at 30s. per fathom. The flat road shaft to sink below the 150, by boring machinery, at 41s. per fathom. The 150 fm. level to drive west, by six men, at 11s. per fathom; the lode is carried 5 ft. wide, in which we break good stones of yellow copper ore. The development of the various points is progressing satisfactorily.

TANKERVILLE GREAT CONSOLS.—Arthur Waters and Son, March 27: The reports for the last three weeks have given a fair account of the present state and future prospects of the mine—Tankerville, Pennerley, and Bog—as they appear to us, and no words of ours could give any further information on the points now under development. We have to-day sampled 20 tons of lead ore in Bog Mine for sale next week.

WEARDALE.—James Blenkinsop, March 21: Killhope Head Vein: The coal drift east has considerably improved for last week; the vein is 18 in. wide, and worth 20 cwt. of ore per fathom. The Trent level west is now within 4 fms. of the stope end. In whimsley level stope there is no change in the end since last week. There is not much change in the stope—i.e., nothing special or new. The features are generally a little improved for ore. Old Main Vein: The coal level has considerably improved last week; ground more kindly. The level end is worth 10 cwt. of ore per fathom, and is in grey beds. The west end vein is divided into two branches in the end, chiefly on the south side of the level. The stope in the end is the same as last week, yielding from 30 to 45 cwt. per fathom. I expect the new whimsley will be on the mine this week. We are pushing ring as fast as possible. The dressing is progressing better than last week; machinery in working order.—Burtree Pasture: Donaldson's Level: The vein is strong, with more quartz and hard rider; fluor-spar is not looking so kindly. The vein is 5 ft. wide; there is a little ore, but not sufficient to value. There is no change in the stope above; the level is worth 25 cwt. of ore per fathom. There is no change worth noting in the stope above Millburn's level. The ore is raised very slowly at Burtree Pasture.—Green Lows: Watson's Air Drift: The vein is about 4 ft. wide, composed of spar, rider, and mangle, but with no ore to value. We are just approaching ground where we expect an improvement from indications below.—Lowe's Drift: East: The end is extremely hard; vein 2 ft. wide, but poor. I think part of the vein is off to side.—Quarry Level: The foremost rise is up to bottom of copper hazel, and the vein, as frequently occurs, has latched to the side; we must now prove same by cross-cut, as there are no indications where it has left. Foster's rise has been yielding the usual quantity—10 cwt. of ore per fathom, but we have come to hard hazel at the top. The vein is evidently hitched; this, I have no doubt, will be found right in a day or two. The stope in this vein has generally improved a little during the last week.—Dent's Level: Bowe's rise is now within 3 fms. of the stope end, and there is not so much water to contend with. We hope soon to get a communication with the drift above; the vein is improving in appearance. No ore yet to value. The stope in the same as last week—worth from 16 to 20 cwt. per fathom.—Grove Rake: The main level in Rake vein has considerably improved for ore the last week, and the end is more compact; worth 20 cwt. of ore per fathom. I hope we are entering on a good course of ore. The middle drift east from Hill's rise is also looking more promising; the vein is firmer, and worth for ore from 8 to 10 cwt. The cross-cut north from Rake level continues in hard rider, a mixture of stope, and spar. Bid's sump is still in plate and grey beds; we have sunk only 4 ft. during last week. The progress is slow, and water troublesome. The general appearance of the stope or ore workings are about the same as last week.—Bolt's Burn: There is no change in Coal Hill drift.—Brandon Walls: The water-wheel commenced working last Thursday, and pumps set to work; it appears to be in firm working order. The repairs or woodmen are repairing and putting in order the whimsy shaft at G-rove Rake.

WEST CARADON.—N. Richards, March 26: There is no particular change to notice throughout the mine since reported on last week. The rise and stope in the back of the adit level on Gilpin's lode will yield in the aggregate 3½ tons of copper ore per fathom. A stope in the bottom of this level will yield 1 ton of ore per fathom. The south part of Jope's lode, on which we are rising in the back of the 38 fm. level, is about 1 ft. wide, producing saving work for copper.

WEST CREBOR.—J. Andrews, March 26: We are making good progress in sinking the engine-shaft below the 80, but the lode in the shaft is unproductive. The lode in the 95 west is 6 ft. wide, and yields a little ore and mangle, but not to value.

WEST GODDLEPHIN.—S. Hodge, Francis Hodge, March 26: Fair progress is being made in sinking the engine-shaft. There is no change in the lode. We have suspended one of the stopes in the back of the 80 fm. level east, and placed the men in the other stope; lode worth 12s. per fathom. The 50 west on Pink

is worth 6s. per fathom. The rise in back of Pink is worth 9s. per fathom. No other change.

WEST GONAMENA.—N. Richards, March 26: We have suspended the driving east of the lode, in the back of the midway level, and placed the men to drive the midway level, where the lode is looking quite as well, producing stones of copper ore, and the ground a little easier for exploring.

WEST HOLWAY.—March 27: In the 110 level west driving will again be commenced. In the 80 east the cross-cut after driving 7 yards north has reached the hanging side of the lode, and a splendid discovery of lead is the result, yielding at present 1½ ton per fathom, and its prospects all that can be desired for further improvement. Will report more fully in a few days. It is certainly most encouraging, and adding considerably to the value of the mine. The cross-cut going south, and adding considerably to the value of the mine. The near approach to Plantation lode.

WEST MARY ANN.—T. F. Tremellen, March 26: Nothing that has transpired during the past month has induced me to modify the opinion expressed at the last meeting respecting the improvement of the lode. It is well-defined, 2 ft. wide, and the underlay is 1½ ft. to the fathom, intermixed throughout very finely with rich silver-lead, with a quantity of barytes, prisms, lookan, fluor-spar, quartz, and mangle, all of which are good indications for rich deposits of lead. We are making good progress in sinking, and shall be down the required depth by the next meeting for driving north and south to prove the ore ground gone down from above. At the 40 the men have been driving a cross-cut to intersect the lode which was heaved by a slide. We have cut a branch of quartz about 1 ft. wide going south, which we are now driving upon; water is coming freely from the same.

WHEAL BENNY.—Thomas Cocking, March 26: The lode in the end and stope, east of engine-shaft, continues to yield a fair quantity of rich tin. We are pushing on with our dressing as fast as possible. I hope in the course of a fortnight to get 2 tons of tin ready for the market. All the machinery is in good working order.

WHEAL CREBOR.—H. Phillips, P. D. Holman, March 25: Fair progress is being made in sinking the new shaft below the 144; there is no change in the lode since reported. The lode in the 144, driving east of new shaft, is over 4 ft. wide, containing arsenical mangle intermixed with copper ore. The lode in the 144, driving west of new shaft, is intermixed with spar and capel on the south part, but as we remarked in week similar changes have taken place during the drive west of the shaft; the lode will yield 11 tons of ore and 4 tons of mangle per fathom. The stope in back of this level will yield 5 tons of ore and 4 tons of mangle per fathom. We are forcing on the winze sinking below the 132, east of No. 2 winze, by the side of the lode, in order to effect a communication with the 144, east of shaft, with as little delay as possible; the lode remaining in the side will yield 5 tons of ore per fathom. The lode in the 132, driving east of the winze, will yield 1 ton of ore and 1 ton of mangle per fathom. The lode in the stope in the back of this level will yield 4 tons of ore and 3 tons of mangle per fathom. The lode in the stope in the bottom of the 120, east of the winze, will yield 10 tons of ore and 2 tons of mangle per fathom. The lode in the stope in the back of the 48, east of new shaft, will yield 4 tons of ore and 4 tons of mangle per fathom. All other points are without change.

WHEAL GRENVILLE.—T. Hodge, March 26: The 205 east end produces low price tinstone. The winze below the 190 east level coming down before said end is passing through moderate ground, worth about 7s. per fathom; sinking at 5s. per fathom. The 150 east end is worth 13s. per fathom for the part carried. The 140 west end is improved, worth 8s. per fathom. The 130 west end is worth 8s. per fathom. The 120 west end is worth 10s. per fathom. No other change worthy of note.

WHEAL PEEVOR.—W. T. White, Thomas C. King, March 26: We have no very particular change to report. The men, in driving the 48 cross-cut north are making good progress; and during the last 2 fm. driving we are continually coming across small branches, which contain both tin and copper. We intend opening a little on the large and best of these, when convenient to do so, as most of the lodes in this district improve in size and are more productive a certain distance from the cross-course than when close by. Within the past week we have dilled up all the old workings in the shallow levels (north)—30, 16, and deep adit levels—and we find the branches we have been meeting with in the 48 cross-cut are connected with the lodes worked on in those levels, which, in many places, appear to be extensive. We are now exploring these, and as we extend, we have no doubt good results will follow. We have a party of tributors working in bottom of the deep adit level on a strong, masterly, and well-defined lode, situated 9 fms. north of the engine-shaft. Its underlie is, as near as possible, 18 in. in adit north; 3 tons of stuff broken therefrom by these tributors make a produce of 1 cwt. to the ton of stuff, giving the quantity of black tin contained in the 3 tons of stuff 3 cwt.; this was broken in two or three days. According to our dilling we have about 8 or 9 fms. more to drive the 48 cross-cut to cut this lode at that level, which we hope to do in about four or five weeks. This is a good point, as we have every reason to believe the lode will be found to be a very productive one. It is also standing whole throughout the mine. There is another copper lode about 15 fms. north of this, which must be cut in the 48 cross-cut as we drive. These are independent lodes from the Great North Downs lode, for which the cross-cut was started. We have not yet cut anything in the 60 cross-cut south, but we must be very near Peavor Bottoms lode. At the new shaft on Great North Downs lode the men are now cutting in north to the tin part of the lode, which we expect to reach in a short time. This part of the lode is still a little or more, and there is still good work to be seen. The other part of the men are driving west on copper part, which produces some good stones of copper. We intend to commence sinking below the deep adit level next month. Have no other change.

WHEAL UNY.—W. Hamblay, March 27: The work referred to in last week's report—raising and dividing the engine-shaft, putting in footway, &c.—is being done; operations are now confined to cutting across the lode. In the course of the last week the men have been able to ascertain its character and extent. There is no change to notice in any other point in operation throughout the mine. The machinery continues to work well, and the usual returns kept up.

ECTON COPPER MINES—SPECIAL REPORT.

March 13.—I have much pleasure in handing you my report on the Ecton Copper Mines, which it would have been impossible for me to do in so short a time if it were not for the able assistance I received from your worthy manager, Mr. Wm. Bowman. I need scarcely refer to the provincial notoriety acquired by the Ecton Copper Mines in consequence of their great richness, other than to say there is abundant evidence to place the correctness of the traditional and written reports beyond a doubt.—Present Operations: In Salt's adit a party of men are driving west on the Ecton vein. The ground in the extreme end is hard, composed of quartz, and is a siliceous or flinty rock. Until the tunnel has passed through this hard rock there is little or no hope of getting ore in payable quantities; but as soon as the hard rock has been passed there is a reasonable chance of getting payable ore. There is a cross branch about 14 ft. east of the end of the tunnel about 18 in. broad, thickly impregnated with green carbonate of copper, which, to my mind, indicates the existence of a chamber of copper ore in the immediate vicinity.

Clayton's adit has been driven a long distance into the hill, and is a splendid piece of work; this adit has passed through several lodes and branches, the Clayton lode being proved very rich. In exploring at the horizon of the deep adit your manager is confining his operations to what he considers the most promising lodes. The tunnel driving on Clayton's lode has hitherto been very hard, but it appears to be undergoing a change for the better; there are spots of ore in the lode, but not sufficient to value. A party of miners are clearing out the level on Chadwick's lode, which, so far as can be seen, is rather small, and though slightly impregnated with copper, does not contain enough to value. In the back (roof) of this level we broke a good piece of copper ore, and the manager has ordered some men to follow it up for the purpose of testing its value.

There is also a party driving on Vivian's lode for the purpose of proving its value at a point where it forms a junction with the Quarry lode. This is a very promising lode, and I shall not be surprised to hear they have struck payable ore on it any day. (A valuable discovery was made here two days after this report was written.) A pumping and a winding engine have been erected near Clayton's engine-shaft, at the adit level; pillars and chimney-shafts have been built, and the work very substantially done, and reflects much credit on your engineer. Clayton's engine-shaft has been drained to a depth of 180 ft. below the adit, and is found to be in fairly good order, and I think you will have no difficulty in draining the mines with your present appliances.

The Ecton Copper Mines are situated on the western side of Ecton Hill, which is said to be 600 ft. above the stream which flows at its base. The whole of the formation, as far as I could discover, is stratified limestone of the lower carboniferous period, which has been much flexured and contorted by volcanic action. The general disarrangement of the strata proves most conclusively to my mind that the principal volcanic force was towards the centre of Ecton Hill; and as there can be very little doubt that this volcanic force brought the minerals to the surface, I shall expect to find the largest bodies of ore much nearer the centre of the Hill. In fact, it is my opinion that the bodies of ore hitherto found are subordinate to some monster deposit. This opinion may very naturally excite surprise amongst those who have been in the habit of searching for copper in the older rocks. I am quite certain, however, that no person will question the fact that the geological formation of the Ecton Mines is unique amongst English copper mines, not only on account of its great richness, but from the general characteristics of the formation; and it is the nearest approach to anything of the kind which I have ever seen in connection with some of the great copper centres of Australia.

The Burra-Burra Mine, which for many years was considered the richest copper mine in the world, was said to bear no resemblance to any other lode or deposit of copper ever seen up to that time, and was in the shape of an inverted cone. Some of the Ecton deposits are more in the form of a cone, while others are in the form of enormous pipes from 40 fms. to 80 fms. in length, and almost as broad as they are long; and some having been successfully followed down to a vertical depth of over 1200 ft., their durability is placed beyond a doubt.

I have referred to the Ecton and Clayton Mines as having been notoriously rich, and I have no doubt that as soon as the water has been drained out of these mines places will be found containing large chambers of ore which will pay very well, but I attach little or no importance to those places as compared to the great deposits of ore you are likely to find in the great central deposit I look upon the various galleries and shafts which have been constructed as worth to the present company fully 10,000l. The exploration of Ecton Hill is not only interesting in a scientific point, but I believe if judiciously carried out it will lead to the realisation of large profits. The particular characteristics of the formation render it absolutely necessary that no spot of ore, however small, should be treated with indifference, as it is highly probable that by following a string of small deposits of ore the value of a knife it may suddenly open out into a large chamber of ore which will produce tens of thousands of tons.

The inclement weather has interfered to a certain extent with surface operations, nevertheless fair progress has been made in every department. Houses for workmen, offices, smiths' and carpenters' workshops, &c., are all approaching completion, and altogether the company are to be congratulated on having made a good beginning. With regard to the future operations, I fully endorse all which is being done by the manager, with the addition of the adit on Swanslow vein being cleaned out with as little delay as possible, and the exploration of this part of the mine being pushed on with a full complement of men.

As I fully explained to your manager I was most favourably impressed with this part of your property from the first, and after carefully considering the matter in all its bearings I am deeply impressed with the idea that you will get a rich mine here for a comparatively small outlay. In conclusion, I may say I have no doubt in my own mind as to its being a valuable property, and I congratulate the company on securing the services of Mr. W. Bowman, a shrewd man of business, he has evidently the interest of the company at heart, and I am pleased to call attention to the fact that everything throughout the mine is conducted with the most rigid economy, which is as essential to the realisation of profits as the actual finding of the ore.—THOS. COLLINGWOOD KITTO.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS, FOR THE QUARTER ENDED MARCH 31, 1883.

Mines.	Tons.	Amount.
Devon Great Consols	2802	£5192 8 6
Melancon	1750	4407 10 0
South Caradon	825	3377 15 6
Gunnislake (Olliters)	537	2489 10 6
Levant	441	2315 12 0
Bedford United	531	1877 7 0
Wheal Crebor	436	1437 4 6
South Tolcarne	134	836 13 0
Marka Valley	273	718 10 0
Holmbush	335	564 15 0
Prince of Wales	168	493 14 0
West Caradon	110	337 10 0
West Wheal Seton	87	356 13 6
West Kitty	42	327 12 0
South Devon United	260	326 0 0
Mid-Devon	65	296 0 0
Wheal Coates	70	292 0 0
Glasgow Caradon	80	249 12 0
Devon Great United	65	248 12 6
New Cook's Kitchen	68	202 15 0
Collacombe Consols	54	181 11 0
Tincroft	60	180 0 0
West Wheal Tolgus	39	167 14 0
East Caradon	40	158 0 0
New Trumpet Consols	15	126 2 6
Phonix	10	108 0 0
Botallack	10	93 0 0
Gawton	152	78 9 0
West Poldice	23	79 7 0
Wheal Jewell	28	57 8 0
Wheal Agar	10	47 11 0
New West Caradon	15	43 17 6
West Gonamena	8	31 8 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Companies.	Tons.	Amount.
Vivian and Sons	1,976	£6,593 15 9
P. Grenfell and Sons	1,763	4,992 17 9
Nevill, Druce, and Co.	1,810	3,548 13 0
Williams, Foster, and Co.	1,903	5,847 17 8
Mason and Elkington	505	1,576 5 3
Charles Lambert	1,250	6,143 12 4
Elliott's Metal Company	295	1,038 0 3
Total	9,361	£27,746 9

WYOMING AND IDAHO.—The geology of these States cannot be better studied than in the elaborate reports of the United States Geological and Geographical Survey of the Territories (Washington Government Printing Office) the twelfth and last annual report of which, including the labours of the corps for the field season 1878 and the office work until the close of the existence of the Survey by law of June 30, 1879, has recently been issued. The report was prepared under the superintendence of Dr. F. V. HAYDEN, U. S. Geologist, and occupies about 2000 imperial 8vo pages. The first part deals with the geology, palaeontology, and zoology of the region, and the second with the geology of the Yellowstone National Park, its thermal springs and topography. The report is rendered especially valuable by the many hundreds of illustrations which accompany it, and will be of inestimable utility to those who will hereafter be engaged in opening up the economic and industrial resources of the States to which the reports refer; whilst they will be an enduring monument to the scientific skill and practical ability of all engaged upon the work.

CASSELL'S PUBLICATIONS.—The Life and Work of St. Paul, part 27, by Archdeacon Farrar, contains the chapter on Paul's last letter and the concluding chapter, together with the commencement of the appendix. Knight's Dictionary of Mechanics, part 88, extends from Wine-press to Woolf's engine.

WATSON BROTHERS, MINEOWNERS, STOCK AND SHARE DEALERS, &c 1, ST MICHAEL'S ALLEY CORNHILL, LONDON

Money was first coined from English copper in 1717, when the Government of that time purchased for the purpose 700 tons, at 147l. per ton! What a blessing it would be to the mining interest if the present Government, Liberal as it is called, would purchase 1000 tons or so of English now copper, and coin it into money! Instead of 147l. a ton it could now be bought for a little more than one-third of the price: 500 or 1000 tons a year taken off the market in this way would be a great boon to the miner, and a convenience to the public. The miners could be paid in coppers if necessary, if the coinage were overdone.

Some 40 years ago the writer had lessons in the "divining rod" from an old "Dowser" in Cornwall; and we are inclined to think the result of the experiment was published in the *Mining Journal*, together with some explanations as to its causes and effects.

In 1871 the Silver lode at Prince of Wales was worth 50l. and 60l. per fathom. On Feb. 4 of that year a stone of ore weighing 1 cwt. was sent to Messrs. Johnson and Matthey, and yielded at the rate of 4000 ozs. to the ton, equal in money value to 1000l. per ton. This stone produced 127 ozs., and was sold at 5s. 8d. per ounce. The district around has been noted for silver for many years, and Langford, East Cornwall, and Brothers, and yielded over 300,000l. worth; and at Langford and East Cornwall we hope to get a lot more. Silver occurs here and in Prince of Wales in bunches or rich deposits, and they are come upon suddenly and unexpectedly.

The letter of "S. M. A." in the Journal of last week, puts the Parys matter very plainly before the shareholders. We have every reason to believe that if the amalgamation is carried out a large and valuable property may be made. We can raise large quantities of stuff at Parys, but only at a loss. Mona has large smelting and manufacturing works, where what does not pay to raise and sell might pay well to manufacture and smelt. If carried out it is proposed that every shareholder in Parys shall have a fully paid-up 1l. share *pro rata* for what he now holds on payment of 3s. per share, in three instalments of 1s. each.

In the 80 west at West Crebor the lode is 6 ft. wide, and very promising.

Even at the present price of lead 30 tons a month would leave a profit at D'Eresby Mountain, and to pay 10 per cent., on the 1000l. debentures would require less than 10l. a month; and as they will be a first charge upon the property, every shareholder in his own interest should secure as much as he can, and until all have replied we cannot say anything to those not shareholders. Any remaining afterwards will be allotted *pro rata*.

We hope to have something important to say in regard to Langford next week.

On the Stock Exchange there has been a little more business doing, and prices generally have improved, though closing somewhat below the best prices. English railways are mostly 1 to 2 per cent. better, cheap money and the fine weather bringing in a few buyers; traffic returns are fairly satisfactory. Mexican Railways and Grand Trunk stocks have fluctuated considerably; the traffic receipts were in both cases better than expected, though showing heavy decreases. American Railways are very flat. Among miscellaneous securities Brush Electric Light shares are in demand, also the low-priced shares; of one or two other similar concerns it is said that their business is improving. Foreign stocks are firm, but show no great changes of any importance.

TO THE METAL TRADE.

FOR COPPER, TIN LEAD, &c., apply to—
MESSRS. PERRY, BOYLE, AND CO.,
SWORN METAL BROKERS,
ALLHALLOWS CHAMBERS, LOMBARD STREET LONDON.
(ESTABLISHED 1849.)

HENRY NUTT,
BIRMINGHAM.

PURCHASER OF
LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, TIN
ASHES, TERNE ASHES, AND ALL REFUSE CON-
TAINING TIN AND LEAD.

HENRY WIGGIN AND CO.,
(LATE EVANS AND ASKIN),
NICKEL AND COBALT REFINERS,
BIRMINGHAM.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MARCH 29, 1884.			
IRON.	£ s. d.	TIN.	£ s. d.
Fig. 60s, f.o.b., Clyde...	2 2 3/4	English, ingot, f.o.b....	87 0 0
" 60s, f.o.b., Wales...	2 3 3/4	" " " "	88 0 0
" 60s, f.o.b., London...	2 4 3/4	" " " "	89 0 0
" 60s, f.o.b., London...	2 5 3/4	" " " "	90 0 0
" 60s, f.o.b., London...	2 6 3/4	" " " "	91 0 0
" 60s, f.o.b., London...	2 7 3/4	" " " "	92 0 0
" 60s, f.o.b., London...	2 8 3/4	" " " "	93 0 0
" 60s, f.o.b., London...	2 9 3/4	" " " "	94 0 0
" 60s, f.o.b., London...	2 10 3/4	" " " "	95 0 0
" 60s, f.o.b., London...	2 11 3/4	" " " "	96 0 0
" 60s, f.o.b., London...	2 12 3/4	" " " "	97 0 0
" 60s, f.o.b., London...	2 13 3/4	" " " "	98 0 0
" 60s, f.o.b., London...	2 14 3/4	" " " "	99 0 0
" 60s, f.o.b., London...	2 15 3/4	" " " "	100 0 0
" 60s, f.o.b., London...	2 16 3/4	" " " "	101 0 0
" 60s, f.o.b., London...	2 17 3/4	" " " "	102 0 0
" 60s, f.o.b., London...	2 18 3/4	" " " "	103 0 0
" 60s, f.o.b., London...	2 19 3/4	" " " "	104 0 0
" 60s, f.o.b., London...	2 20 3/4	" " " "	105 0 0
" 60s, f.o.b., London...	2 21 3/4	" " " "	106 0 0
" 60s, f.o.b., London...	2 22 3/4	" " " "	107 0 0
" 60s, f.o.b., London...	2 23 3/4	" " " "	108 0 0
" 60s, f.o.b., London...	2 24 3/4	" " " "	109 0 0
" 60s, f.o.b., London...	2 25 3/4	" " " "	110 0 0
" 60s, f.o.b., London...	2 26 3/4	" " " "	111 0 0
" 60s, f.o.b., London...	2 27 3/4	" " " "	112 0 0
" 60s, f.o.b., London...	2 28 3/4	" " " "	113 0 0
" 60s, f.o.b., London...	2 29 3/4	" " " "	114 0 0
" 60s, f.o.b., London...	2 30 3/4	" " " "	115 0 0
" 60s, f.o.b., London...	2 31 3/4	" " " "	116 0 0
" 60s, f.o.b., London...	2 32 3/4	" " " "	117 0 0
" 60s, f.o.b., London...	2 33 3/4	" " " "	118 0 0
" 60s, f.o.b., London...	2 34 3/4	" " " "	119 0 0
" 60s, f.o.b., London...	2 35 3/4	" " " "	120 0 0
" 60s, f.o.b., London...	2 36 3/4	" " " "	121 0 0
" 60s, f.o.b., London...	2 37 3/4	" " " "	122 0 0
" 60s, f.o.b., London...	2 38 3/4	" " " "	123 0 0
" 60s, f.o.b., London...	2 39 3/4	" " " "	124 0 0
" 60s, f.o.b., London...	2 40 3/4	" " " "	125 0 0
" 60s, f.o.b., London...	2 41 3/4	" " " "	126 0 0
" 60s, f.o.b., London...	2 42 3/4	" " " "	127 0 0
" 60s, f.o.b., London...	2 43 3/4	" " " "	128 0 0
" 60s, f.o.b., London...	2 44 3/4	" " " "	129 0 0
" 60s, f.o.b., London...	2 45 3/4	" " " "	130 0 0
" 60s, f.o.b., London...	2 46 3/4	" " " "	131 0 0
" 60s, f.o.b., London...	2 47 3/4	" " " "	132 0 0
" 60s, f.o.b., London...	2 48 3/4	" " " "	133 0 0
" 60s, f.o.b., London...	2 49 3/4	" " " "	134 0 0
" 60s, f.o.b., London...	2 50 3/4	" " " "	135 0 0
" 60s, f.o.b., London...	2 51 3/4	" " " "	136 0 0
" 60s, f.o.b., London...	2 52 3/4	" " " "	137 0 0
" 60s, f.o.b., London...	2 53 3/4	" " " "	138 0 0
" 60s, f.o.b., London...	2 54 3/4	" " " "	139 0 0
" 60s, f.o.b., London...	2 55 3/4	" " " "	140 0 0
" 60s, f.o.b., London...	2 56 3/4	" " " "	141 0 0
" 60s, f.o.b., London...	2 57 3/4	" " " "	142 0 0
" 60s, f.o.b., London...	2 58 3/4	" " " "	143 0 0
" 60s, f.o.b., London...	2 59 3/4	" " " "	144 0 0
" 60s, f.o.b., London...	2 60 3/4	" " " "	145 0 0
" 60s, f.o.b., London...	2 61 3/4	" " " "	146 0 0
" 60s, f.o.b., London...	2 62 3/4	" " " "	147 0 0
" 60s, f.o.b., London...	2 63 3/4	" " " "	148 0 0
" 60s, f.o.b., London...	2 64 3/4	" " " "	149 0 0
" 60s, f.o.b., London...	2 65 3/4	" " " "	150 0 0
" 60s, f.o.b., London...	2 66 3/4	" " " "	151 0 0
" 60s, f.o.b., London...	2 67 3/4	" " " "	152 0 0
" 60s, f.o.b., London...	2 68 3/4	" " " "	153 0 0
" 60s, f.o.b., London...	2 69 3/4	" " " "	154 0 0
" 60s, f.o.b., London...	2 70 3/4	" " " "	155 0 0
" 60s, f.o.b., London...	2 71 3/4	" " " "	156 0 0
" 60s, f.o.b., London...	2 72 3/4	" " " "	157 0 0
" 60s, f.o.b., London...	2 73 3/4	" " " "	158 0 0
" 60s, f.o.b., London...	2 74 3/4	" " " "	159 0 0
" 60s, f.o.b., London...	2 75 3/4	" " " "	160 0 0
" 60s, f.o.b., London...	2 76 3/4	" " " "	161 0 0
" 60s, f.o.b., London...	2 77 3/4	" " " "	162 0 0
" 60s, f.o.b., London...	2 78 3/4	" " " "	163 0 0
" 60s, f.o.b., London...	2 79 3/4	" " " "	164 0 0
" 60s, f.o.b., London...	2 80 3/4	" " " "	165 0 0
" 60s, f.o.b., London...	2 81 3/4	" " " "	166 0 0
" 60s, f.o.b., London...	2 82 3/4	" " " "	167 0 0
" 60s, f.o.b., London...	2 83 3/4	" " " "	168 0 0
" 60s, f.o.b., London...	2 84 3/4	" " " "	169 0 0
" 60s, f.o.b., London...	2 85 3/4	" " " "	170 0 0
" 60s, f.o.b., London...	2 86 3/4	" " " "	171 0 0
" 60s, f.o.b., London...	2 87 3/4	" " " "	172 0 0
" 60s, f.o.b., London...	2 88 3/4	" " " "	173 0 0
" 60s, f.o.b., London...	2 89 3/4	" " " "	174 0 0
" 60s, f.o.b., London...	2 90 3/4	" " " "	175 0 0
" 60s, f.o.b., London...	2 91 3/4	" " " "	176 0 0
" 60s, f.o.b., London...	2 92 3/4	" " " "	177 0 0
" 60s, f.o.b., London...	2 93 3/4	" " " "	178 0 0
" 60s, f.o.b., London...	2 94 3/4	" " " "	179 0 0
" 60s, f.o.b., London...	2 95 3/4	" " " "	180 0 0
" 60s, f.o.b., London...	2 96 3/4	" " " "	181 0 0
" 60s, f.o.b., London...	2 97 3/4	" " " "	182 0 0
" 60s, f.o.b., London...	2 98 3/4	" " " "	183 0 0
" 60s, f.o.b., London...	2 99 3/4	" " " "	184 0 0
" 60s, f.o.b., London...	2 100 3/4	" " " "	185 0 0
" 60s, f.o.b., London...	2 101 3/4	" " " "	186 0 0
" 60s, f.o.b., London...	2 102 3/4	" " " "	187 0 0
" 60s, f.o.b., London...	2 103 3/4	" " " "	188 0 0
" 60s, f.o.b., London...	2 104 3/4	" " " "	189 0 0
" 60s, f.o.b., London...	2 105 3/4	" " " "	190 0 0
" 60s, f.o.b., London...	2 106 3/4	" " " "	191 0 0
" 60s, f.o.b., London...	2 107 3/4	" " " "	192 0 0
" 60s, f.o.b., London...	2 108 3/4	" " " "	193 0 0
" 60s, f.o.b., London...	2 109 3/4	" " " "	194 0 0
" 60s, f.o.b., London...	2 110 3/4	" " " "	195 0 0
" 60s, f.o.b., London...	2 111 3/4	" " " "	196 0 0
" 60s, f.o.b., London...	2 112 3/4	" " " "	197 0 0
" 60s, f.o.b., London...	2 113 3/4	" " " "	198 0 0
" 60s, f.o.b., London...	2 114 3/4	" " " "	199 0 0
" 60s, f.o.b., London...	2 115 3/4	" " " "	200 0 0

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 1X 6s. per box more than 10 quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—There is still a very unsatisfactory tone prevailing in our markets, and owing to an absence of demand and the existence of a very uneasy feeling, prices have further depreciated, and buyers, for the most part, still refuse to pay the current rates. There are many features which prove the trade to be in a very bad and feeble condition, various symptoms which give cause for anxiety, and sundry events which cripple and injure traders in the carrying out of their business. It is difficult to assign any special cause for the present depression; it has been brought about by degrees. Step by step, little by little, the trade has gradually become worse and worse. For the last 18 months or more there has been a continued reduction in profits, a repeated falling away of prices, and now the minimum scarcely seems to have been touched, and there is an easy tendency of prices. There has not been a sudden change from good trade into bad trade, from briskness into dullness, from high prices to low prices, but a steady falling away; loss added to loss, business more and more curtailed, and spread over such a vast number of hands that few gain any remunerative return. Such has been the condition and tendency of the trade, culminating at last in the present depression. This does not argue very well for the future, and the prospects of an immediate revival are thereby diminished. Traders who have been so greatly crippled by the depression not yet terminated have not the means, the courage, nor the will to enter into fresh business beyond absolute requirements. Prices, when they were higher than what they are now, were considered low, and in consequence several purchases were effected, but ere the prompts fell due the markets had much further depreciated, and heavy losses have been the consequence.

Is it any wonder, then, that there should be a general indisposition to do business even at the reduced rate? What is there to prevent prices further receding? There is no stay, no foundation to the market. The further prices recede the greater are the losses which are incurred, and the spring season is now too far advanced to give any hope of a forthcoming revival yet awhile. Business is rarely active in the summer, and therefore, it seems more than likely that now no general revival can be effected before the autumn, though it is to be hoped, but not expected, that increased orders may shortly be given out owing to the limited business that has lately been transacted. The trade with India remains very slack, and business is difficult to effect through a variety of causes with any of the markets in that country. This week the Bank of Bombay has raised its rate of discount from 9 to 10 per cent., so that business with that market is likely to become still more contracted than what it has been just lately. Here money is cheap, but that does not stimulate confidence. In Bombay it is dear, and anxiety is caused thereby. The one is the result of bad trade, and the other interferes with business. In consequence thereof, the prospects not of our market alone, but also of trade generally, are made dull. Business has already, and with the high rate of discount ruling in Bombay, it is clear that from one of our principal markets there is likely to be a continued absence of demand until such a time as money becomes cheaper. The cheapness of money here does not counterbalance the ill effect of dear money in Bombay, and in consequence another drawback to trade has been effected. The time of depression is prolonged, and the outlook of the market is made still more dull and gloomy than it was before.

COPPER.—This market remains very inanimate, and sales have been made at still further reduced prices. There seems to be no bottom to the market, and prices are allowed to crumble away by 2s. 6d. per ton per day, or even more, almost without any check. They are now reduced to prices nearly as low as they have been on any previous occasion, and yet it is strange that, notwithstanding the reduced rates, there is not the slightest inclination shown to make purchases. The low prices fail to stimulate the demand, and prove the undoubted wretchedness of the present state of the trade. Holders are thoroughly wearied of their stocks, and yet are obliged to cling to them with a certain amount of tenacity, because if they show the slightest inclination to press sales they unnerve even what buyers there may be in the market; and in the enfeebled condition which is now its principal characteristic any pressure on the part of holders to force sales would be attended by tremendously reduced prices. As it is holders effect sales on every possible opportunity without unduly pressing sales, and the consequence is that repeated slight and almost daily concessions are made. It does not seem likely that speculators will be tempted into this market; there is nothing to encourage them, even the low rates failing to form the slightest temptation. Manufacturers are reported to be badly off for orders, and in order to obtain specifications to keep their works in operation they are not disposed to accept lower prices. With India there is little doing, and the trade is in such a bad and quiet condition that quotations are almost nominal. In fact, buyers have more to do with regulating prices than what sellers have. It is more a question as to what buyers' limits are. If they are at all reasonable they are more often than not accepted, because in the present critical state of affairs sellers are anxious to refuse no practical business; and while in this they show discretion, yet at the same time it also indicates that the trade is in a most unsatisfactory condition. Strong sheets are quoted down 2s. per ton.

IRON.—There is a good deal of steadiness in this market, which almost indicates that prices are now so low that they cannot recede to any further great extent. Several manufacturers have for a long time past refused to accept the cheap prices which are now being so freely quoted by certain houses, and in consequence the amount of business they receive is very limited. It is chiefly among the manufacturers who turn out the higher classes and better brands of iron that refuse to take the present prices, and therefore for the most part they only receive such orders where the quality of the iron cannot in any way be called into question, and iron that is required for special work. The difference in prices between high and what are known as ordinary brands is very great, and it is therefore not in the least surprising that almost all the orders in the market go to the sellers of the latter description of iron. The trade in all parts of the country is dull, and particularly in Staffordshire, where the competition of the northern manufacturers is keenly experienced. Lower wages are being arranged for in the hope of curtailing the losses that are made in turning out iron at current low rates, yet manufacturers find that as they diminish the cost of manufacture so buyers' limits are repeatedly reduced, and therefore they are placed in no better position. A few works, those who have made the cheapest sales, have perhaps been, and are still, fairly well occupied, but the trade generally is still in a very dull and deplorable condition, and shows no sign of improvement.

As the following advice from the several chief iron centres there is nothing that

calls for any special comment, but they confirm the quietude in the general trade. The amount of business being done in the market is iron containing more or less restricted, and prices all round are steady, with a slightly easier tendency. The Glasgow warrant market opened on Monday with a steady appearance, and business was done between 42s. 5½d. and 42s. 6½d.; and at the opening on Tuesday there was a firmer tone, and transactions were recorded between 42s. 6d. and 42s. 7½d.; but later on the market became quieter, and the price fell away to 42s. 5d. On Wednesday the market was again steady, the quotation being 42s. 5d., and yesterday there was scarcely any alteration, and the quotation was 42s. 5½d., whilst the closing figure this afternoon is telegraphed as 42s. 5½d. The shipments last week were 11,577 tons, against 12,421 tons for the same week of last year, being a decrease of 844 tons, and which makes the total shipments for the whole of this year 117,312 tons, against 129,401 tons for the same time of last year, and 135,170 tons for the similar period of 1882. There is one less furnace in blast than a week ago, the total being 93, but the public stock has been increased by 428 tons, and amounts to 594,470 tons, against 594,042 tons last week. The imports of Middlesbrough pig-iron into Grangemouth last week were 4520 tons, against 4990 tons for the corresponding week of last year, being a decrease of 470 tons, and which makes a total increase for the whole of this year, compared with last, of 10,159 tons.

On the Cleveland market there have been but few sales effected, but, at the same time, prices have continued very firm, the quotation for No. 3 being 37s. 3d. to 37s. 6d., the latter being the general price amongst makers for sharp delivery. The price asked for No. 4 forge iron is 35s., and there are buyers at a small number of the best public stock, but the market is in a very unsettled state, a reduction of only 40 tons, and the quantity now in store is 80,737 tons. The shipments of pigs last week were good, amounting to about 21,000 tons, whilst the deliveries for the whole month show an increase of about 11,000 tons compared with February, and are estimated at about 64,000 tons. This is expected to cause a large reduction in stocks when the next returns are made up. The manufactured trade keeps dull, and orders being very scarce, the market must be reported lifeless. The price for ship-plates is 5s. for boiler-plates 6s., and for ranges 4s. 15s. per ton. The Wolverhampton market is in a very unsettled state, wages are being reduced, buying, already limited, is made still more so pending the quarterly meeting, and the finished ironworks are only partially employed, whilst prices all round are unimproved. Sheets can be bought as low as 7s., and tank-plates are quoted at 7s. to 7s. 10s. per ton. Fair quality bars are ruling at 6d. 10s., and common kinds at 6s. Pigs are dull of sale, Fregedger hematites being quoted at 58s. 6d., native all-mine sorts at 60s., part-mine at 42s. 6d., and cinder pigs at 37s. 6d. to 38s. per ton. The Birmingham market is dull, and sellers are held back in the hope of reduced prices. The Birmingham market is dull, and sellers are held back in the hope of reduced prices. Sheets are quoted down about 5s. for singles and 10s. for doubles. The uncertainty of the future scale of wages tends to greatly retard business.

TIN.—The turnover in this metal has been fairly large, and at the early part of the week prices continued to show an upward tendency, but have since been easier. There is no special new feature, fluctuations in a speculative market are of regular occurrence, and, therefore, no great consequence is attached to them, unless they be of a very marked character. The principal change during the week was on Wednesday, when a fall of fully 20s. per ton was effected. But previous to that day there had been rather sharp rise, and, therefore, the reaction was not more than of ordinary occurrence. At the early part of the week the cash price had advanced to 84s. 10s.; but since which fully 25s. per ton less has been accepted, and business has been done at various intermediary rates. Yesterday the Banca sale in Holland took place, and realised an average price of 52½s. which is equal to about 87s. 5s. per ton.

Upon the announcement being made here there was no great impression on the market, but the tin market was a slightly steadier appearance, the market stiffening up to 2s. 6d. per ton. The course of the market this week is not without its significance, though it does not foretell the future. It shows that few operators have the courage to follow up the market; it signifies that while there is a material interest in the advancement of prices yet there is not enough confidence in the maintenance of the market to induce operators to purchase after a slight rise has been effected; it shows that operators are satisfied with the smallest profits, and only too glad to get rid of any remaining stock, and that the market is in a state of uncertainty. It must not, however, be forgotten that it was a reported reduced supply that caused prices to advance, and if these reports prove correct we may yet see another advance before very long.

STEEL.—There is still a quiet market, and prices almost all round are steady.

TIN-PLATES.—There has been a slightly better demand both for cokes and charcoal during the last few days, but prices have not undergone any quotable change.

SPELTER remains quiet, and we quote Ordinaries at 14s. 10s. per ton.

LEAD is dull. There are sellers of Spanish at 11s. per ton, and English is quoted at 11s. 7s. 6d. to 11s. 12s. 6d. per ton.

QUICKSILVER.—The importers' price is without alteration, whilst second-hand parcels are less freely offered.

The settlement of the fortnightly account has again occupied the chief attention of dealers in the MINING SHARE MARKET, but there has also been more doing in shares, and in several instances a rise in prices, especially in one or two prominent tin mines. Those chiefly dealt in have included Dolcoath, East Pool, West Kitty, Wheal Grenville, Wheal Agar, Wheal Crebor, Prince of Wales, West Frances, Roman Gravel, Trevaunance, and a few others.

TIN.—The standards for ore have not been advanced since Jan. 7, but there is a better demand springing up for tin mines, and one or two have advanced in price. Carn Breas are quoted 2 to 2½; Cook's Kitchen, 10 to 11. Dolcoaths advanced to 72, and leave off 70 to 72; the agents hope to sell 600 tons of tin for the next three months. East Pools have been dealt in at an advance to 41. 43. East Lovells, ½ to 1; East Blue Hills, ½ to ½; Killifreth, ½ to ½. South Frances, 8 to 8½; it was stated last week a call of 5s. per share had been made at the meeting. The loss on four months' working was 1006½, and the balance against the company 1187½. The tin sold (130 tons) realised 6142½, or 47½ per ton, being 3½ 13s. per ton less than that sold at the previous meeting. The labour costs paid up to March were 4060½; merchants' bills, 2848½. South Condurrow, 8½ to 9; Tincroft, 3½ to 3½; West Basset, 2 to 2½.

We erroneously stated last week that at Wheal Grenville the profit charging 16 weeks cost against 14 weeks' returns was 204½. The accounts show that the profit is in reality 433½ 1s. 2d. The dues to Dec. 6 belonged to last quarter's accounts. The bank charges and committee fees are for the half-year. The actual figures were—Tin sold, 5997½ 5s. 5d.; carriage charged in cost sheets reallocated by smelters, 17½ 2s. 6d.; together, 6014½ 7s. 11d.; less dues, 199½ 18s. 2d.—5814½ 9s. 9d.; whilst on the other side of the account we have—Labour cost 16 weeks, 3633½ 17s. 8d.; merchants' bills, 726½ 17s. 11d.; coal account, 884½ 1s. 11d.—5294½ 17s. 6d., which leaves profit, 519½ 12s. 3d.

West Frances, 8 to 8½. West Godolphin, 1 to 1½, call paid. Wheal Agar, 12½ to 13½; Wheal Basset, 3 to 3½; Wheal Grenville, 5 to 5½; Wheal Kitty (St. Agnes), 7s. 6d. to 12s. 6d. West Kitty, 12 to 12½ ex div.; at the meeting the accounts showed a profit of 2965½ 6s. 5d. on four months' working, and a balance at bank of 3263½ 5s. 5d., out of which a dividend—the warrants for which will be sent out on Monday—of 10s. per share (3000½) was declared. The tin sales (117 tons) realised 5983½ 10s. 5d. The costs are charged to the "four months ending Feb. 3," and were for five months against four months' returns. The report was of a very satisfactory character. New Kitty, 1½ to 1½; at the meeting there was a balance in favour of the mine of 163½ 16s. 9d., and a call of 2s. per share was made for future operations. At the Trevaunance meeting on Wednesday there was a balance in favour of the mine of 195½ 14s. 2d., and a call of 1s. per share was made. A discovery was announced, worth 30l. per fathom, at the 53 cross-cut on the Pink lode. The ore is worth 20l. per fathom for copper, and is supposed to be the forerunner of tin. Polberro, 1½ to 1½; the Pink lode, which runs through Blue Hills, East Blue Hills, and Penhalls, and has produced upwards of 100,000l. profit, is said to be worked up to the boundary of Polberro. South Kitty, ½ to ½; Mounts Bay, 4s. to 6s.; Trevaunance, 8s. to 9s.; New Trumpet, 1 to 1½.

COPPER remains about the same, and there is not much doing in shares in copper mines; quotations, therefore, are mostly nominal. Bedfordford, 1½ to 1½; Devon Great Consols, 3 to 3½; Gunnislake (Clitters), ½ to 1½; Mellanear, 1 to 1½; Prince of Wales, ½ to ½; West Seton, 4 to 4½; West Crebor, 1s. to 2s. Wheal Crebor, 1½ to 1½; the lode in 144 west is worth 11 tons of copper ore and 4 tons of mundic per fathom, which shows a falling off similar to previous changes in the drive. The sampling this week is 510 tons. South Caradon, ½ to ½; The New Caradon, 4s. to 6s. Devon Friendship, 2s. to 3s.; the 42 east is worth 10l. per fathom. All other points about same; 22 tons of copper ore will be sampled this week.

Lead mines continue dull and depressed, and prices are mostly nominal. Vans are quoted 1½ to 2½. Great Laxey, 10 to 11; the accounts prepared for presentation at the meeting in London on April 9 show—balance previous account, 3274½ 6s. 6d.; labour cost 11,842½ 7s. 6d.; merchants' bills, freight and insurance, royalty, management, and other expenditure, 8165½ 19s. 8d.; October dividend paid, 3750½=27,032½ 13s. 8d. Ore sold, or ready for sale, 22,607½ 10s.; sundry receipts, 2420½ 15s. 2d.; leaving balance. There is lead and blende worth 924½ on hand, but not included in

the balance-sheet. The report from the managers give as usual a detailed account of the operations at Great Laxey during the past half-year. The directors hope that both report and balance-sheet will give satisfaction to the shareholders generally. In consequence of the continued downward tendency in the price of metals, and from other causes quite beyond their control, the directors felt themselves unable to declare the usual quarterly dividend in January last. They are, however, pleased to state that, should no unlooked-for serious circumstance occur, they anticipate being able to declare, at their meeting in April, a dividend of 5s. per share.

R

per cent. for 266,500l. Six per Cent Second Mortgage Debenture Stock, redeemable in about 24 years by means of a cumulative sinking fund of 2 per cent. The stock will form the second charge on all the property and revenues of the company already mortgaged as security for the 2,000,000l. First Perpetual Mortgage Debenture Stock, which is the only prior charge to which the stock now offered will be subject. The present issue, producing 240,000l. net, is to meet that requirement, and the Mexican Government subvention being specially applicable, so far as necessary, to such outlay, will be primarily employed towards the service of the loan. The company's share of the subvention, which has 10 years to run, is now about 80,000l. per annum, and although the payments to the company, which were regularly received during many years, fell greatly into arrears during the past year, they were still sufficient to meet the interest and sinking fund of this issue, independently of its mortgage on the general property and revenues of the undertaking. The company reserves the right of increasing the amount of the sinking fund at any of the yearly drawings. The amount of the subscription is payable by instalments extending to the end of May.

The Ball Gold and Diamond Dredging (B) Company is now in process of formation with a capital of 7500l., in shares of 10l. each, for working by means of the Ball dredger, the bed of the river Tibagy, which flows in the district of Castro, province of Parana, South Brazil. The prospectus states that the climate is remarkably salubrious, the temperature varying only between 66° and 37° Fahr. A seaport, a railroad, and a car track connect the township of Tibagy with the sea. The total concession covers 8500 acres. The value of the hillside gravels has been taken as the basis of the calculations, instead of the much higher value of the river gravel, which, especially in certain known reaches, such as Imbau, and a place three miles from Tibagy, whence fabulous amounts have been taken from time to time by hand, and another place where in one week six men saved 500l. worth of diamonds, at Tibagy prices, which are very low. Continual prospecting by means of special tools will always precede the company's plant, which will thus always be kept at work in the very richest places. The owners are so satisfied with the merits of the Ball system, that the following terms have been agreed upon for working the river bed:—1. The company to choose and locate the richest 800-acre plot of river bed they can find, and place and work thereon a Ball plant, paying all expenses.—2. In consideration thereof the owners abandon to the company two-thirds of the gold and diamonds raised.—3. The company can further secure further lots of 800 acres by applying for them after prospecting, and the only obligation is to place and work thereon a Ball plant within reasonable delays.—4. The company can abandon any plot and take its plant to another. No money is paid for property—no money is paid for patent rights—no money is paid for promoting the company. The whole of the money subscribed is applicable to working the gold-bearing strata. Taking an average of the few similar companies placed on the market lately, it is found that the capital required is 347,000l., the payments to owners 264,000l., the working capital 83,000l., or scarcely 25 per cent. of the whole. In this company the total capital required is only 7500l. The owners receive nothing in cash or shares, but only one-third of returns, and the whole capital will be applicable to working the gravels.

The Irish Land Purchase and Settlement Company, with a capital of 250,000l., in shares of 1l. each, has been formed to put into operation the provisions of Part II. of the Tramways and Public Companies (Ireland) Act, 1883, which were framed with the object of relieving the congestion of population existing in some districts of Ireland, and of aiding in the creation of an occupying proprietary. With these objects the company propose to purchase suitable estates. When the lands are not too thickly populated it will sell to such of the tenants as are willing to buy their respective holdings, and where the lands are congested or overcrowded it will remove and settle the surplus population on such other portions of the company's lands as are available for the purpose. The farms of those who go will be consolidated with the farms of those who remain. The Act affords to this company very great facilities for these operations. As every movement for adding to the material prosperity of Ireland is calculated to facilitate and encourage the development of her mineral resources the present company is worthy of success.

Devon Great Consols, 3½ to 3; the Railway shaft is being pushed down to another level, when a cross-cut will be put out to intersect the lodes close by the shaft. The lode in west of Watson's is worth 2 tons of copper ore per fathom.

Devon Great United, ½ to ½; the managers report that the lode in the winze sunk below the 104 fathom level is worth 6 tons, and the rise above 120 is worth 2 tons per fathom. The 65 tons of copper ore sold last week realised 248l. 12s. 6d., and 42 tons of ore 46l. 19s. 10d., the total amount being 295l. 12s. 4d.

Drakewalls, ½ to ½; the report and recommendations of the directors were approved at the general meeting on Thursday; the monthly sales of tin will, it is said, be considerably increased. Kit Hill, ½ to ½; the lode in the shaft is looking much better, and better progress is being made in driving the Tunnel level.

Ecton, ½ to ½; it was stated a fortnight since that the mine has been inspected for a shareholder by Mr. Thos. Collingwood Kitto, and in another column of to-day's Journal his report is published; it is very encouraging. He reports that some of the Ecton deposits are not unlike in form those of the celebrated Barra Barra Mine of South Australia, where he himself had considerable experience. He opines that the ore bodies hitherto found are subordinate to some monster deposit, and with regard to future operations fully endorses all that is being done by the resident agent.

North Bury, ½ to ½; the immediate point of interest here (writes a correspondent) is the 15 cross-cut to cut the copper lodes. They are now within 2 fms. of the first copper lode. Shares are being bought by persons living in the locality of the mine, whose opinion is that a valuable lode of copper ore will be met with.

South Kitty, ½ to ½; the agent reports that "the lode in the new shaft has greatly improved and enlarged during the last few days, and we still continue to break tinstuff. We expect further improvement as we reach depth, and we shall soon be ready for pumping machinery, which we hope soon to erect. We have a very suitable engine, &c., under consideration." A telegram received to-day (Friday) states that an assay has been made of the new lode, and that there is a great improvement in value.

South Wheal Frances have advanced to 8½, 8½; and are more in demand, owing it is said to the prospects of recommencing the payment of dividends at no distant period, and the mine looking well.

South Devon, ½ to ½; the 120, west of Martin's shaft, has been driven upwards of 3 fms. during the past month. The lode is fully 5 ft. wide, and worth 12l. per fathom. A sampling of ore will take place on April 7.

West Seton, ½ to ½, and reported in good demand. The mine, it is said, is opening out some rich tin ground. West Basset, ½ to ½, and reported in demand. The North Frances part of the mine has improved, and sales of tin are likely to be increased.

California Gold, ½ to ½; the resident manager telegraphed the directors on Thursday:—"Mill run, 326 tons, yield \$2200. Second mill started. Hidden Treasure Mine putting out good ore."

Ruby and Dunderberg, ½ to ½; the weekly report advises very little work at the Home Ticker during the week, owing to holidays and the miners being employed part of the time in clearing the roads from snow. At the Lord Byron the tunnel is nearly completed; when this is done the orebody passed through will be prospecting. At another part of this mine some tributaries are extracting ore: 22 tributaries are at work at the Dunderberg Mine, a considerable quantity of ore is waiting to be sent down from this mine to the furnaces. The telegram received last Tuesday advises a partial resumption of shipments; but the roads were still in bad order, which was much retarding the work; it is hoped that each week will now show an improvement in this respect.

La Plata, ½ to ½; the February output of ore from La Plata Mine was 1200 tons. A nice body of soft carbonates of good grade was struck in the south workings, and good ore was also met with in a rise from the west drift. In the north drift also the rise entered a good body of ore, although the grade is not so high as in the west. South from shaft a small vein of high grade ore is being followed. Prospecting work is being carried on by the extension of the south drift by drifting east from the bottom of Gneon incline, and by the shaft, which has been sunk 39 ft. in the month, being still in hard limestone. On the whole the mine has improved, and the output for March is expected to be of much better grade. The continuous storms prevailing during the month prevented the regular shipment of the ballion, of which 85 tons still remained to be sampled and consigned. The weather is now fine.

Organo, ½ to ½, and reported in demand throughout the week at improved prices; the greatest confidence is entertained by those interested that the future of the company will be prosperous. The crushings to date amount in the aggregate to not far short of 2000 tons, showing an average of over 11 dwts. per ton, a rate at which, it is understood, any gold mine can yield good profits. Much of the quartz referred to has, however, been taken from the surface, and from a part of the mine which had crushed in, and was consequently of poor character. The average of the better class of quartz—

1 oz. 2 dwts. per ton is, therefore, considered to be more like that which will be obtained in future. The greatest interest is taken in the Socorro part of the company's property, which though only discovered last year, has so far returned in profit as much as has been spent upon it.

Tankerville Great Consols, 1s. to 2s.; the half-yearly meeting was held on Wednesday, full particulars of which appear in another column, by which will be seen the importance of the shareholders at once coming forward and subscribing for the remaining 10 per cent. preference shares to enable the management to carry on with all speed and vigour the operations in sinking shaft, &c., to the junction of lodes, where it is expected some important discoveries will be met with during the next few months.

In Lead Mine Shares there has been less doing than in other descriptions, but there is, nevertheless, more inclination to deal. The price of the metal has not further receded, so that it is hoped that an upward movement may be looked for. The Great Laxey report and balance-sheet, to be presented at the meeting on April 9, are satisfactory. The directors state that in consequence of the continued downward tendency in the price of metals, and from other causes quite beyond their control, the directors felt themselves unable to declare the usual quarterly dividend in January last. They are, however, pleased to state that, should no unlooked-for serious circumstance occur, they anticipate being able to declare, at their meeting in April, a dividend of 5s. per share.

Roman Gravels, ¼ to ¼; the mine continues to look well, the ends driving being worth together about 11 to 12 tons of lead ore per fathom, and the stopes generally are producing their usual quantity of lead ore.

Messrs. M'Calmont Brothers and Co. announce the numbers of £3 bonds, amounting to 12,600l., of the Northern Central Railway Company (issue of 400,000l. sterling, or \$2,000,000 gold Six per Cent. Consolidated General Mortgage bonds, Series A, and 200,000l. sterling, or \$1,000,000, Series B) to be paid off at par, either at the company's offices at Baltimore or in London on July 1.

It is notified that the half-year's interest on the Six per Cent. A Debenture Stock, and the Four per Cent. B ditto, of the Windsor and Annapolis Railway Companies, due April 1 next, will be paid on and after that date at the company's bankers, Messrs. Roberts, Lubbock, and Co.

At the twenty-first ordinary general meeting of the Mauritius Land, Credit, and Agency Company, held on March 25, the report and statement of accounts to Dec. 31 were adopted, and a dividend of 3s. per share was declared, making the usual distribution of 15 per cent. for the year.

The Norfolk and Western Railroad Company notify to holders of \$990,000 6 per cent. Enlarged Mortgage Bonds of the Virginia and Tennessee Railroad, maturing June 30, 1884, that they will be entitled to have the time for payment extended to June 30, 1900, with interest at the rate of 5 per cent. per annum, provided they join in the agreement to do so before May 31 next. Bonds not presented for extension will be purchased at par at maturity.

It is notified that interest to March 31 on the Preferred Shares of the North Brazilian Sugar Factories at the rate of 7 per cent. per annum (less income tax) will be payable by warrants on and after April 1 next at the company's bankers, Messrs. Harris, Farquhar and Co., and Messrs. Martin and Co.

OLD SHEPHERDS.—There is no change to report, and the quotation remains 1 1-16ths to 1 3-16ths. The market has a very hard appearance. The "bears" made a most ineffectual attempt to break down prices. The state of the account, showing heavy over-sales, was of itself sufficient to sustain prices, independent of the influential buying for investment and the weeding out of weak holders. The mine is looking well, the lode at the 102 of itself warranting considerably higher prices.

OSCAR GOLD MINE.—We are informed that a few stones from the lode at this mine, weighing together 10 lbs. 10 ozs., have been crushed by Mr. Claudet, and produced 8 ozs. 16 dwts. of gold, being at the rate of about 1850 ozs. per ton. Mr. J. H. Murchison (the Chairman), and Capt. Daw (one of the directors), have left for the mines this week, and on their return the statutory general meeting will be called. The machinery is in hand and will be delivered in a short time, but some tons of the richest stone are at once to be sent to England.

TREVAUNANCE UNITED.—At the meeting of shareholders on Wednesday (Mr. John B. Reynolds presiding) there was a large attendance of shareholders, upon whom (writes a correspondent) a surprise was sprung by the information of the important discovery which has taken place in the property. The improvement is in the 55 cross-cut on the rich Pink lode, where they have a course of copper ore, probably the richest in the county of Cornwall. It should be remembered, however, that only 3 fms. have been driven on it; and, seeing that it is the Pink lode, which has produced 100,000l. profits in Penhalls, and which is known to be productive in the Polberron Consols sett, there is every reason to suppose that the improvement will be a permanent one, and will greatly add to the celebrity of the St. Agnes district. There can be no doubt that, from the Chairman's observations and those of the manager, the impressions on their minds concerning the mine were very favourable. There were no liabilities due and unpaid; on the contrary, a credit balance was shown of 195l. 14s. 2d. It was thought prudent, however, in order to keep up the good financial position of the mine, to make a small call of 1s. per share, which was ample for all the requirements of the coming four months' working. A detailed account of the meeting will be found in another column.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Mar. 20—	Roman Gravels.....	100	£ 6 15 6	Walker, Parker & Co.
— ditto	.....	50	6 15 6	Panther Lead Co.
— ditto	.....	50	7 1 0	Runcorn Company.
25—	Isle of Man.....	60	9 2 6	Walker, Parker & Co.
— ditto	.....	60	9 2 6	Quirk, Barton, & Co.
27—	Van.....	80	8 0 0	Sheldon, Bush, & Co.
— ditto	.....	40	8 7 0	Weston, Son, and Co.
— ditto	.....	30	8 2 6	Adam Eyton and Son.

JOHN RISLEY, STOCK AND SHARE BROKER,
AND MINING SHARE DEALER,
38, CORNHILL, LONDON, E.C.
ESTABLISHED 1860.
BANKERS: LONDON AND WESTMINSTER, Lothbury, E.C.

HORACE J. TAYLOR,
(Seven Years Assistant-Secretary to the Port Phillip and Colonial Gold Mining Company (Limited)).
38, GREAT ST. HELEN'S, LONDON, E.C.
STOCK, MINING, AND MISCELLANEOUS DEALER.
ESTABLISHED 1874.

BUYER or SELLER of the following:—
100 Almada and Tiritio. 70 Eberhardt. 100 Orita.
50 Bratsberg. 50 Flagstaff District. 200 Parys.
50 California Gold. 50 Polono. 50 Prince of Wales.
75 Callao Bis. 25 Gold Coast. 10 Ruby.
100 Chile Gold. 100 Homes Mines Trust. 50 South Caradon.
200 Chontales. 50 Killifreth. 20 Trevaunance.
100 Colombi in Hydraulic. 100 La Plata. 25 T. Lima A.
250 Corporation So. Aus. 60 Mounts Bay. 50 do B.
Copper. 20 New Emma. 100 United Mexican.
100 Devon Friendship. 200 Nouveau Monde. 100 Victoria Gold.
100 East Blue Hills. 100 Old Shepherds. 75 Wheel Crebor.
300 East Wheel Rose. 60 Organo.

TOLIMA (Champion Silver Mine of the World) still recommended. Mail expected on Monday next. Dividend payable to-morrow, 28th inst.
BANKERS: CENTRAL BANK OF LONDON (Limited).

C. PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,
ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c
and DROSS or ORES containing
COPPER, LEAD, AND ANTIMONY

GEO. G. BLACKWELL,
26, CHAPEL STREET, LIVERPOOL.
HANDLES
MANGANESE, BARYTES, SPARS, and ALL ORES on SALE
or PURCHASE.

EDGAR JACKSON,
(Associate Royal School Mines),
ANALYST AND ASSAYER,
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and
other Ores. ASSAYING TAUGHT.
106, QUEEN VICTORIA STREET, LONDON, E.C.

JOHN LYSAGHT (LIMITED),
BRISTOL SPELTER WORKS,
BUYERS OF
ZINC ASHES, ZINC OXIDE, HARD SPELTER,
CALAMINE, &c.

JOHN M. STUART,
CONSULTING MINING ENGINEER,
ANALYST AND ASSAYER,
OFFICES:
11, QUEEN VICTORIA STREET, LONDON, E.C.

MESSRS. J. AND J. BANNER,
BROKERS,
LEITH OFFICES, LIVERPOOL.

BUYERS AND SELLERS OF MINES, MINERALS, &c.
COMPANIES FORMED ON EQUITABLE TERMS.

ALLAN FORSYTH,
MINING ENGINEER,
LYDENBERG, TRANSVAAL REPUBLIC.
INSPECTS, AND REPORTS FURNISHES ON TRANSVAAL MINING
PROPERTIES.

J. A. JONES,
MINING ENGINEER,
GIJON (ASTURIAS), SPAIN.
Mines inspected and reported on. Assays and valuations effected.
Has on hand offers of Mines of Copper, Calamine, Blende, Phosphate
of Lime, Tin, Lead, Iron, Manganese, and Manganiferous
Iron Ores.

SCOTT AND WYATT,
STOCK AND SHARE DEALERS,
BALIIC CHAMBERS,
108, BISHOPSGATE STREET, E.C.
ALL DESCRIPTIONS OF SECURITIES DEALT IN AT CLOSEST PRICES.
BANKERS: NATIONAL PROVINCIAL BANK OF ENGLAND (Limited).

WOOD AND TREHERNE,
MINERAL BROKERS AND DEALERS IN MINING PROPERTIES,
ROOM 55, GILFILLAN BLOCK (BRITISH VICE-CONSULATE),
ST. PAUL, MINN., U.S.A.
Offer to the English Investing Public rich developed and undeveloped Gold, Silver, Copper, Iron, and other Mines and Mineral Lands in all parts of the United States and Canada.
These properties have been placed in the hands of Messrs. Wood and TREHERNE for IMMEDIATE SALE.
Correspondence with this view invited from Capitalists and Promoters in London and elsewhere.

ESTABLISHED 1866. THIRTEEN YEARS IN CORNWALL.
**SAMUEL JAMES, STOCK BROKER AND MINING SHARE
DEALER, 14, ANGEL COURT, LONDON, E.C.**
Member of the Redruth Mining Exchange.

Those who wish to buy or sell mining shares should consult Mr. JAMES. Mr. J. devotes his entire attention to home and foreign mines, and places his special information at the disposal of his clients. That mining offers undoubted advantages for quick returns no one can deny. Look at the enormous sums of money paid in dividends by home and foreign mines. A large number of wealthy families owe their present proud positions to adventuring in LEGITIMATE MINES. With a better price for metals many of the smaller priced shares would immediately advance some hundreds per cent.
MINES INSPECTED AND REPORTED UPON BY THOROUGHLY
COMPETENT AGENTS.

There are many mines worth attention, as proceedings of recent shareholders' meetings prove beyond doubt. During the last 40 years there has been no opportunity presented itself as the present for investment in British mines. Metals are certain to advance. In well-informed circles no doubt is entertained on this point. Buyers must not further delay orders.

SPECIAL BUSINESS in the following or part:—			
30 Bedford United.	100 Farys Copper.	50 Co. So. Austr. Cap.	40 Denver Gold.
10 Carn Camborne.	30 Pennant.	50 Eberhardt.	30 Flagstaff District.
5 Cook's Kitchen.	10 Roman Gravels.	120 Frontino.	100 Gold Coast.
20 Collacombe Consols.	10 South Caradon.	100 Guinea Gold Coast.	50 Hoover Hill.
75 D'Eresby Mountain.	50 South Condurrow.	50 Indian Consolidated.	100 Indian Glenreek.
5 Devon Consols.	100 South Darren.	50 Javali.	40 Kohinor B.
100 Devon Friendship.	100 South Devon United.	50 Kapanga.	100 La Plata.
25 Devon United.	10 South Frances.	50 Last Chance.	50 Lisbon Berlyn.
20 Drakewalls.	40 Tamar.	50 Montana.	30 New Emma.
10 Dolcoath.	50 Trevaunance.	50 Nouveau Monde.	50 Organo.
50 East Blue Hills.	100 Tanker. Gt. Consols.	50 Orita.	50 Potosi.
10 Ecton.	40 Trevaunance.	15 Port Phillip.	10 Panucillo.
100 East Caradon.	85 West Caradon.	30 Ruby & Dunderberg.	10 Richmond.
50 East Wheel Rose.	60 West Crebor.	50 T. Lima A.	50 Tocopilla.
20 Frongoch.	60 West Gnamena.	100 Cartago.	20 Transvaal Gold.
100 Goggin.	10 West Kitty.	20 Callao Bis.	20 United Mexican.
10 Great Laxey.	5 West Polono.	50 Chile.	50 Victoria Gold.
20 Gunnislake Clitters.	5 Wheel Basset.	20 Chontales.	100 Western Andes.
10 Great Holway.	50 Wheel Coates.	100 Colombian Hydraulic.	
100 Grogwinion.	25 Wheel Crebor.		
50 Home Mines Trust.	10 Wheel Jane.		
20 Killifreth.			
50 Kit Hill Gt. Consols.	100 Asia Minor.		
20 Kitty St. Agnes.	50 Akankoo.		
60 Mounts Bay Consols.	50 Birdseye Creek.		
20 New Caradon.	60 Bratsberg.		
100 Old Gunnislake.	100 Cankim Bamoo.		
100 Old Shepherds.	100 Cartago.		
20 Phoenix United.	25 California Gold.		
30 Pennant.	40 Callao Bis.		
50 Prince of Wales.	50 Chile.		
	20 Chontales.		
	100 Colombian Hydraulic.		

* S. JAMES is a Buyer or Seller of any of the above Shares.
To save extra correspondence, and to prevent disappointment, buyers will please state the best price they will give, and sellers the lowest price they will accept, subject to reply by wire or return of post, whichever preferred.
Orders by letter or telegram promptly attended to. Speculative accounts not opened on any terms whatever. CLOSING PRICES of over 150 Home and Foreign mines issued daily.

TELEPHONE No. 212.
BANKERS: IMPERIAL BANK, Lothbury, E.C.
MINING OFFICES, 1, ST. MICHAEL'S ALLEY, CORNHILL,
LONDON, E.C.

ESTABLISHED UPWARDS OF FORTY YEARS.
MESSRS. WATSON BROTHERS, in referring to their public Circular in the *Mining Journal*, would also observe that they BUY and SELL SHARES at the net market prices of the day in all well-established and respectable Mining Companies; also in English and Foreign Funds, Railway Stocks, &c.

GEORGE ELLIOT & CO.,

(GEORGE ELLIOT & Co. since 1864, and previously GLASS, ELLIOT & Co., Makers of the First Atlantic Cable),

WIRE ROPE MANUFACTURERS.

LONDON OFFICES—

23, Great George St., Westminster, London.

WORKS—

BUTE DOCKS, CARDIFF.

SPECIAL IMPROVED PLOUGH STEEL,

PATENT STEEL AND IRON WIRE ROPES

For Colliery, Mining, Agricultural, and General Purposes.

ROPES FOR AERIAL TRAMWAYS,

SHIPS' RIGGING.

COPPER LIGHTNING CONDUCTORS,

GALVANISED STRAND,

SPECIALLY FLEXIBLE ROPES, &c., &c.

are given to ensure the Ropes being constructed in the way most suitable for their particular work, and by the use of specially selected and tempered metal, the greatest possible uniformity is obtained.

Notices to Correspondents.

EAS: DEVON CONSOLS COPPER MINE.—As no reports are given through your columns of the East Devon Consols Copper Mine, and as the shareholders do not appear to receive any communications as to the progress of their property, it would be quite interesting to receive some news of its welfare. Perhaps some of your readers in the neighbourhood of Buckfastleigh can tell us whether there is anything doing at all at the mine. —X. Y. Z.

DEVON AND CORNWALL CHINA-CLAY COMPANY.—Can any correspondent state where the mines or works of this company are situated, and who is connected with it—especially who are the bankers, as a reference is required. It is believed to have temporary offices somewhere near Oxford-street, Manchester. Also when was the company registered, and what was the date of registration. —J. E. C.

WIRAL BENT.—The suppression of his reply to Sir Charles W. Crauford is considered by Mr. H. Reynolds to be one-sided and unfair. We regret that he should be dissatisfied; but cannot allow personal or ungentlemanly language from any correspondent. If Mr. Reynolds were to inform a judge (as he writes for publication in this week's Journal) that "when they have said the lease has been forfeited I have given them the lie direct," it would scarcely be accepted as conclusive evidence of title, or ensure a verdict in his favour. As to his statement in his letter marked "not for publication," and addressed to the Editor—"I was almost ready to curse you, and have no more to do with you for ever and ever," our only reply is—Do so at once if it will give you pleasure; it will not disturb us.

MACHING AND VALUING GROUND.—"Fatus" should have sent his name; but as a reply to his enquiries may be interesting to others we give it:—1. If the lode be yielding 10 per cent. ore, and is reported worth 2 tons per cubic fathom, it means 2 tons of the ore, and not of fine copper.—2. No calculation can be based on the statement "the 144 west is worth 15 tons of good ore and muddle per fathom" unless you know that the captain invariably quotes per cubic fathom, as many quote for the whole height and width to be carried.—3. If the agent is "going to ascertain how much metallic mineral can be got out of a given space," he will probably get out the stuff and dress it.—4. Reading books will not much assist you to comprehend these matters, as there is no uniformity in the expression used by miners, or in the method of reporting.—5. If the "agents puzzle the shareholders at the meetings and by the reports," it is probably because the agents are equally puzzled to know what to say to keep the shareholders in good humour until good luck gives them a discovery.

Received.—"C. S. R." (Alma): We cannot interfere in the matter, but have handed all the documents, including that marked "private," to the senior member of the firm first mentioned, and requested him to communicate with you—"J. H. J."—"J. D. A." (San Diego): Next week—"W. B." (Salt Lake City): The numbers have been sent, and will no doubt reach you in due course—"Mackay and Revolution": The secretary states that every letter received at the office has been fully answered.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, MARCH 29, 1884.

PREVENTION OF ACCIDENTS IN MINES.

According to the Home Secretary there is some probability that the final report of the Royal Commission on Accidents in Mines will be issued during the present year. Recently, it is stated, the Commissioners have been actively engaged with experiments showing the value of different kinds of safety-lamps. It is now nearly five years since the Commission was appointed, so that there has been plenty of time given for going most fully into every operation and appliance connected with mining. But whilst the Commission has been at work something like 4500 of our mining population have been killed whilst following their occupation. Whether the report of the Commission will show the means by which the major part of the accidents that resulted in such a serious loss of life can be prevented in the future remains to be seen. It is, however, satisfactory to find that the class of accidents—if accidents they can be called—to which most attention has evidently been paid by the Commissioners, explosions of fire-damp, show a marked falling off during the last three years, as compared with any similar period during the last three decades, notwithstanding the vast increase in the production of coal and ironstone which has taken place. No doubt in connection with some explosion a defective safety-lamp has caused some mischief, for there are defects in some of the best known lamps that cannot be discovered by the most experienced cleaner and trimmer. But, as we are told by the President of the Midland Institute of Mining Engineers, there is a method by which any defect in a lamp can be discovered. It is simply having a bath of gas and plunging the lamps into it, and this has turned out at the few places where adopted the most efficient means by which the safety of a mine can be promoted. But there is a considerable difference it may be said in the quantity and quality of the gas in different districts, of which we hope to hear something in the report alluded to, for one of the most eminent mining engineers draws our attention to the fact that where workings are prosecuted at depths below the general level of the water-bearing strata there is a more fertile production of gas to harass and endanger operations than where the opposite is the case. But, after all, the setting of timber—or the neglect of it—is the cause of a great many of our mining fatalities, and from the returns it appears that during the last 12 years 5426 persons were killed by falls of roofs and sides.

It is to this class of fatalities to which we think attention should be particularly directed. The point appears to be whether the timbering or propping should be performed by the miners or by deputies specially appointed for the purpose. Experience has shown that in the districts where such work is done by deputies the deaths from falls is comparatively trifling with those where it is done by the men, for the latter, knowing that timbering brings no money value in return for the labour expended, causes them to pursue vigorously that for which they are paid, and the neglect in consequence is frequently fatal. In South Wales there are more fatalities from falls in mines than in any other part of the kingdom, and from the last yearly returns it appears that whilst in South Durham there was one death from falls for 622,308 tons of coal raised, in South Wales there was one death for 246,223 tons. This appears to be the result of the

different systems adopted, and was forcibly pointed out by Sir GEORGE ELLIOT in his evidence before a Select Committee of the House of Commons. He said that the seams of Durham and Northumberland were not safer, so far as the roof was concerned, than they were in Glamorganshire. Yet taking the two systems of working, in the one where the roof was propped and maintained by the owners, as in the North of England, and in the other, where such was done by the miners, as in South Wales, he found for every 500,000 tons of coal worked out of Durham and Northumberland there was by the falling of the roof and coal 130 lives lost, whilst in South Wales for every 500,000 tons raised there were 320 persons killed. In the North there were persons of skill and character selected for the timbering, which required great judgment and experience, and such persons were responsible for the safety of the mines. Sir GEORGE further stated that by adopting such a system there would be a greater economy in human life by having it insisted upon than by any other matter connected with the Mines Regulation Act. This appears to be the best means yet suggested for the prevention of falls, the deaths from which are equal to those from all other causes combined, and to which our mines are liable.

MINING PROGRESS IN THE MIDLAND FIELD.

In no part of the kingdom has such progress been made in the development of the minerals during the last few years as in the Midland mining field—Derby, Nottingham, Leicester, and Warwickshire. Derbyshire has not only the finest coal, but valuable deposits of lead, manganese, barytes, fluor-spar, calc spar, and vast deposits of limestone and building stone. Although the Midland field is far removed from a seaport, and but little of the coal is consequently exported, yet this, to some extent, is made up for by its proximity to the Metropolis, to which Derbyshire sends fully two-fifths of all the coal that reaches there by railway, whilst Nottinghamshire and Leicestershire send another fifth. Most of the coal raised in Warwickshire is consumed in that county. The field, as a whole, is second only to that of South Wales, and may be said, for all practical purposes, to be inexhaustible. It may also be said with respect to it that no other district sends so much of its produce away owing to the limited home requirements. Last year, the production of pig-iron in the three counties was only 457,124 tons, which would require 1,000,000 tons of coal; whilst the manufactured iron would consume 300,000 tons, and 300,000 tons may be put down for household and miscellaneous purposes. This leaves a large quantity to be sent away, and, under such circumstances, and in seasons of depression, when other districts have shown a falling off, the Midland field has increased its production.

To some extent this is probably due to its geographical position, and its proximity to the metropolitan and other southern markets, that depend in a great measure on the railways for their supplies of fuel. The following figures, however, will show the rate of progress during the last 12 years:—

	1870.	1882.
Derbyshire	5,102,265	8,358,936
Nottinghamshire	2,115,372	4,967,725
Warwickshire	647,540	1,066,741
Leicestershire	599,450	1,182,922
Total	8,464,627	15,566,324

Nottinghamshire, it will be seen, in the course of the 12 years, more than doubled its production, although there was no great addition to the number of the mines; the addition, however, included the Bestwood Colliery, a very large one, and that at Newstead, on the estate that belonged to Lord BYRON, but now owned by Mr. WEBB. The mining population for several years past, has not materially altered, for, as the production has gone on increasing, the output per man has gone on in the same direction, and even in the prosperous years 1872 and 1873, when wages were so very high, the miners in the Midland field do not appear to have adopted the same course as those in other districts who worked much less than they did before and after. In fact, they appear to have got a good deal more coal in the years named than they did in the three or four succeeding ones.

THE PROPOSED SCIENTIFIC AND TECHNICAL COLLEGE FOR WALES.—The Mayor and Corporation, and the burgesses generally of Swansea, are still making determined efforts to secure substantial Government aid in the establishment of a Scientific and Technical College for Wales, such College to be situated at Swansea—"the centre of the metallurgic industries of the whole kingdom." On Monday last, his worship the Mayor (Mr. R. D. Burnie) convened a special meeting of the council for the purpose of pressing the claims of Swansea for an educational grant from Government for establishing such Science and Technical College at Swansea. The greatest unanimity prevailed on the subject. The Mayor and several of the Councillors urged that whilst the Government had recognised the claims of both North and South Wales for educational grants of 4000*l.* a-year each, and special efforts were being put forward to continue the grant of 4000*l.* per annum also to Aberystwith College, that the claims of Swansea were completely ignored. Scientific and technical education was the great want of Wales at the present moment, and Swansea being situated in the very midst of the great metal and other manufacturing industries, afforded the most admirable site for such institution. During the discussion Mr. Councillor Freeman read a copious extract from what he termed "an able article" in "so high an authority as the *Mining Journal*" in advocacy of the establishment of a Scientific College for South Wales at Swansea, such article contending that neither the College at Cardiff, nor that at Bangor, could possibly afford the students the necessary practical scientific and technical education, they being far too remote from the great works of the district. The Mayor hoped the local press would quote the article just read by Mr. Councillor Freeman from so high an authority on these questions as the *Mining Journal*, as it must forward the object which all had in view. The Council unanimously decided to take every step possible to bring the claims of such Scientific College under the notice of Government, and that a public meeting of the burgesses of Swansea should be called for an early date to strengthen the hands of the Corporation in the matter.

MASSIVE STEEL FORGING.—Sir Joseph Whitworth and Co., of Manchester, have just completed several large steel forgings made out of their patent fluid pressed steel. One of these is a solid forging which is to form the tube or barrel for a 68-ton gun. The length of this forging is 34 ft. 7 in., and the greatest diameter 29 in. In the rough it weighed about 31 tons, and, finished for boring, 28 tons. Amongst other gun material Messrs. Whitworth are making hoops for 100 to 110 ton guns, and some of these weigh as much as 13 tons after they have been rough turned. The other large forgings just completed include two marine crank shafts. One of these is for the Admiralty and is a three-throw crank shaft made solid. The length of the shaft is 28 ft. 5 in., the outside diameter 17 in., with a hole through of 8 in. diameter, and the cranks have a throw of 24 in., or equal to 4 ft. stroke. The weight of the crank was about 19 tons in the rough and is 12½ tons finished. The second marine forging is a spare single-throw crank for the City of Rome. This is a built-up shaft in five pieces shrunk together. The length of the shaft is 13 ft., diameter 25 in., and of collar 45 in.; there is a 14-in. hole in the body and an 8-in. hole in the pins. The crank has a 36-in. throw, and weighs 21 tons.

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.—The winter sessional meetings of the above society were brought to a close on Saturday last, when a very interesting lecture "On the Explosion of Boilers and other Vessels," was delivered by Mr. E. B. MARTEN, C.E., Chief Engineer to the Midland Steam Boiler and Inspection Company. The meeting was held in the large lecture hall of the Manchester Technical School, and there was a very numerous attendance, not only of members, but of engineers specially interested in the subject of the lecture. Mr. THOS. ASHBURY, C.E., the President of the Association, occupied the chair. Mr. Marten illustrated the lecture by his unique and comprehensive collection of models of various exploded boilers, grouped under the

heads of locomotives, furnaces, Cornish, Lancashire, and plain cylinder boilers. A series of models were also shown illustrating the effect of internal pressure in altering the shape of boilers, and a number of interesting experiments were also made by Mr. Marten to explain the various causes of the explosion of boilers. During the course of his remarks Mr. Marten observed that when steam was only used as a condensing medium boilers frequently collapsed by the vacuum within them if they were not provided with an inlet valve. The most usual cause given for explosions had been shortness of water, which was supposed to cause sudden undue pressure, and another more or less supposed cause of explosions was electricity. Sir W. Armstrong had thought that this electricity was formed from the act of evaporation, as he sent details of an observed case at Seghill to Prof. Faraday, who properly explained it as the result of the friction of globules of water carried at great velocity by the steam and rubbed against a wooden jet. As an illustration of some of the fallacies with regard to boiler explosions, Mr. Marten showed that electricity—one of the supposed causes—could only be produced by carefully prepared special appliances, and that, therefore, it was a mistake to attribute explosions to this cause. A hearty vote of thanks was passed to Mr. Marten for his lecture, and the interesting models and experiments by which it had been illustrated.

THE COPPER TRADE.

During the quarter ending March 31, 1884, the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish Ticketing, was 9361 tons, which contained 587 tons 2 cwt. of fine copper, and realised 27,746*l.* 9s. 0*d.*, being equal to an average of 2*l.* 19s. 3*d.* per ton of ore, and 47*l.* 5s. per ton of copper in the ore. The average produce of the ore sold was 6½ per cent. The ores sold at the Cornish Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
Jan. 3...	23 4	0...	75...	95.10	4.981	696.136	2,444 12 0
" 17...	21 8	0...	75...	95.10	4.981	696.136	2,444 12 0
" 31...	21 8	0...	75...	95.10	4.981	696.136	2,444 12 0
Feb. 21...	21 8	0...	75...	95.10	4.981	696.136	2,444 12 0
Mar. 6...	21 8	0...	75...	95.10	4.981	696.136	2,444 12 0
" 20...	21 8	0...	75...	95.10	4.981	696.136	2,444 12 0
Total for the quarter...					9,361	587 2	27,746 9 0
Quarter ending December, 1883...					9,832	611 1	31,011 4 0
Quarter ending September, 1883...					10,023	610 18	32,303 18 0
Quarter ending June, 1883...					9,147	572 7	30,110 9 0
Total for the year...					38,414	2381 8	121,177 0 0
Showing a quarterly average of...					9,603	595 7	30,294 15 0
Corresponding quarter, March, 1883...					10,220	609 12	32,329 8

No ores have been sold at the Swansea Ticketing during the quarter. The figures for previous quarters were—

	Tons.	Fine cop.	Amount.
Quarter ending December, 1883...	1,243	85 10	4,097 11 0
Quarter ending September, 1883...	958	91 13	5,355 13 6
Quarter ending June, 1883...	1,631	220 4	12,396 2 0
Corresponding quarter March, 1883...	1,075	88 13	4,991 13 0

SCOTCH PIG-IRON WARRANT MARKET.

Mr. W. WILSON (Glasgow, March 27) writes:—The warrant market continues remarkably steady, and a fair business is doing, but no one speaks hopefully of the immediate future. The shipping season is now opening, and makers' deliveries are larger in consequence. There will probably be no further accumulation of stocks for a time at least, as the reduced consumption of iron, which there is in forges and foundries, has been met by a reduced production. Shipments are fair for the week, but do not compare favourably. One furnace has been put out at Carnbroe, making the number blowing 93: 421 tons were put into store here last week, while 40 tons were taken out at Middlesbrough. Business was done during the past week at the following prompt cash prices:—

	Thursday, March 20.	Friday, March 21.	Monday, March 24.
42/5, 42/5, 42/5...	42/5, 42/5, 42/5...	42/5, 42/5, 42/5...	42/5, 42/5, 42/5...
Price of Scotch Warrants, March 24	42/5	42/5	42/5
Furnaces in blast in Scotland do.	93	111	107
Iron in store at this date	594,322	585,645	629,599
Shipments of Scotch pig-iron for	11,575	12,421	12,375
week ending March 22	117,310	123,401	135,170
Do, since beginning of year	117,310	123,401	135,170
Price of Middlesbrough No. 3, March 24	37/3	40/3	42/5
Furnaces in blast Middlesbrough dist.	104	119	117
Middlesbrough Iron Imported at			
Grangemouth, week ending	4,520	5,590	4,095
March 22			
Do, do, since beginning of year	66,400	56,231	72,456
Do, do, since beginning of year			67,708

LAND AND LOAN COMPANY OF NEW ZEALAND.

In all young and undeveloped countries the business of money lending is particularly lucrative, the landowners and traders possessing so many opportunities for the profitable employment of money, with the assured prospect of being able to repay it within a comparatively short time, and at the same time to secure permanent advantage to themselves; and New Zealand forms no exception to the general rule. There is a rich and promising country needing development, both of its mineral and industrial resources, and for this purpose more capital than is at present available is absolutely essential. The financial companies connected with New Zealand are returning handsome dividends, and now the Land and Loan Company of New Zealand, with a capital of 1,000,000*l.*, in shares of 5*l.* each, is to be added to the number. The chief objects for which the company is formed are—the lending of money upon security of mortgages of freehold, leasehold, and other property in New Zealand, and making advances against produce or consignments. The purchase, management, and re-sale of freehold or leasehold lands in New Zealand, and of stock and produce in connection therewith; and the conduct of a general agency business, comprising the management of funds which may be sent to New Zealand for investment, the collection of dividends and other moneys, and the care of consignments to and from New Zealand, and their realisation, with power to advance against such consignments.

The success which attends the mortgage business of such undertakings is almost proverbial, and with regard to the investment department of the present company, it is remarked that the increase which is taking place in the value of land in New Zealand is remarkable, and the success attending the careful management of sheep farms has long been fully recognised.

The class of properties proposed to be purchased are those only partially improved and stocked. With care and attention the rough ground can quickly be brought into cultivation and sown down with English grasses, thus quickly increasing the carrying capacity of the land and its value. At the same time, by judicious selection of the breed of sheep and cattle the flocks and herds can be improved, and the yield of wool, beef, mutton, and tallow increased both in quality and quantity. Town reserves will be made upon such properties as may be acquired suitable for the purpose, and portions of the estates laid off in agricultural blocks of limited area for sale or lease to intending settlers. The success which has attended the exportation of meat in a frozen state from New Zealand to Europe cannot fail to effect beneficially its pastoral and agricultural pursuits. The surplus fat stock of the colony can now always be presented in a good market at comparatively small cost and in thoroughly marketable form. For high class breeding stock there will for many years be considerable demand in the north island for the purpose of utilising land as it is acquired from the natives, and to provide for the increasing capabilities of tracts of country already in the course of being brought into cultivation.

In all enterprises of this kind much, of course, depends upon the management, and in this respect the company appears to have been particularly fortunate, having arranged with Mr. F. C. Fulton (who has had more than 20 years' experience in the management of properties in New Zealand) to act as managing director in the Colonies, to make a substantial investment in the company's funds. The settlement at Hawkes Bay has been selected as the opening field for operations on account of its salubrious climate, the fertility of its soil, and its suitability for the raising of the most profitable kinds of sheep and cattle. After careful investigation as to value by the directors,

a contract has been made to take over a property in this district recently acquired by Mr. Fulton for \$4,895. It consists of 7976 acres of freehold land, fenced and sub-divided, and about half laid down in English grasses, which will form a starting point, and the company propose to buy other properties in the same district as opportunities occur. There are about 9000 sheep on the above property which will after inspection be taken over by the company at a valuation. Similar investments which may be proposed in future, and receive the approval of the Colonial board, will be referred to the London board, and will require their confirmation, so that every care seems to have been taken to ensure success by securing efficient management on the spot, and ample control at home.

MINERAL RESOURCES OF THE TRANSVAAL.

Although sufficient time has not elapsed to permit of any results being given in connection with British enterprise in the Transvaal, there can be no question that the information received of the successes of private explorers and gold miners has given rise to a much better feeling than was manifest a few months since concerning the attractions of the region as a field for enterprise. This change of view is in a great measure attributable to the laudable energy and sound practical judgment displayed by the executive of the Lisbon-Berlyn (Transvaal) Gold Fields, who in the comparatively few weeks since the company was formed have done as much real work as has been performed by some other officials in the same number of years. The Lisbon-Berlyn properties, as stated in the original prospectus, contains upwards of 18,000 acres. The progress made with reference to sending out the machinery and organising the staff has been very great, and the arrangements for early working may be said to be practically completed. The most complete mining plant obtainable has been sent out, and a most efficient staff engaged by the company through the good offices of Prof. Price, the well-known expert of San Francisco. The whole of the staff will be on the gold fields about the end of next month, and the machinery in about one month later, and it is confidently expected that within three months afterwards the first shipment of gold will be made.

With regard to the property itself, its merits were referred to when the company was formed; but it may be worth while to repeat a few of the leading facts. It will be recollected that Mr. John N. Stuart, F.R.G.S., supplied a very elaborate report, with drawings and diagrams; he places the whole vein-matter, ore and slate worked together, as of the average worth of 2l. 14s. per ton—a gross value of over 25,000,000l. sterling; he estimates that the cost of working, mining, and milling, including maintenance of mills, would not exceed 12s. a ton, and at this rate he reckons the net profit would be upwards of 19,000,000l. sterling. In reference to the annual profits, he states that, looking to the abundance of water on the Lisbon estate, there should be a net profit of 1400l. per day, or 420,000l. per year of 300 working days, adding that this is based upon employing one-half the water-power, and that, if the whole were used, the revenue would be doubled. This would be from hydraulic working on the alluvial soil alone. With reference to quartz crushing with 450 heads of stamps, he says there would be a profit of 2840l. a day, equal to 852,000l. per annum, allowing only 13 dwts. of gold to the ton of quartz and slate crushed together, the quartz alone running to many ounces per ton. Mr. Stuart reports that he made a large number of tests on the ground, the lowest of which showed over 10 ozs. to the ton, and running up to about 1000 ozs. per ton. The reports of Messrs. John Webster and J. J. Hamilton leave no doubt that Mr. Stuart has rather under-estimated the value of the property than otherwise, and the conclusions arrived at by these gentlemen are no less encouraging. Mr. Webster says, that with the expenditure of capital and the application of skill and efficient management in the development of these farms, they will become, in a comparatively short period, one of the richest gold mining properties in the world. And Mr. Hamilton, in concluding his report says:—“When I consider the extent of ground covered by these farms, the dissemination of gold throughout the alluvial soil, the permanency of the main quartz lodes, the exceptional richness of the smaller leaders, the constant supply of water, and the unrivalled facilities for working, I can safely assert that, so far as my knowledge goes, there is no property in the world which will afford greater, more secure, and more lasting profits on the capital which may be employed in the proper development of its resources.

But the evidence which will, perhaps, be of more weight with the public is that of Mr. W. H. Penning, since he explored and wrote upon the region before the present company was even in contemplation. In his report he has entered into a very careful geological history of the formation of the ground, and states from assays made by himself, in each case 28 lbs. being collected, that the result was 2 ozs. 1 dwt.—6 ozs. 8 dwts.—and by a third assay 2 ozs. 4 dwts., the average of the three being 3 ozs. 11 dwts., and this after having rejected all nuggets and visible gold from the ore used; adding these, he says, 4 ozs. to the ton is obtained. He goes on to say that, one of the most valuable features upon this property is the quantity of water that can be utilised at a great elevation. And he concludes by saying, taking into consideration the proved extent of ground containing auriferous leaders, their average yield and probable extension, the value of the alluvial ground in connection with a sufficiency of water, and the existence of a large and constant supply of water at a great elevation, I have no hesitation in declaring that “Waterfall” is an extremely valuable gold mining property. The attention which the public have already given to the enterprise may be judged of from the fact that already 100,000 shares have been applied for and allotted to 1045 shareholders; the directors are now inviting subscriptions for the remainder of the first issue—50,000 shares—and from the very satisfactory statement which Baron Grant was enabled to make at the meeting reported in another column of to-day's *Mining Journal*, it will be surprising if there be any delay in closing the lists. This issue will give the company an abundance of working capital, whilst the fact that 50,000 shares are reserved for future issue is an ample guarantee for ability to meet all contingencies.

NORTH MEXICAN MINING COMPANY.

From our very cradles we have heard of the fabulous riches of Mexico and Peru in gold and silver. In our younger days our boyish imaginations were excited by the thrilling adventures of Cortez in Mexico, of the Spanish galleons laden with untold wealth in silver which formed the prizes of our great commanders of bygone days when at war with Spain. Even of late years we have heard of schemes to raise capital to explore the depths of the ocean to find the silver supposed to have gone down with the wrecks of those galleons. All this untold silver, however, came from the lower part of Mexico, which was more accessible to the early adventurers.

That these immense riches in silver were not mere fables is amply demonstrated by the records of well-known travellers, such as Humboldt and others. Amongst these was the late Sir Henry Ward, who was Her Majesty's Charge d'Affaires in Mexico, and who made an official inspection of the mining centres for the purpose of obtaining statistical information in his official capacity. The results of his labours appear in two volumes, now very scarce, which opened up visions of untold wealth in the interior of Mexico which could scarcely be believed.

It is a remarkable thing that, rich as the mines of Guanajuato were (which, it should be mentioned, now belong to the United Mexican Mining Company) of Zacatecas, St. Luis, Potosi, &c., all writers, from Humboldt downwards, agree in stating that the richest mines exist in the Northern States of Mexico. Sir Henry Ward, in his journey, fully satisfied himself that this was the case. Throughout his book he repeatedly calls attention to the remarkable richness of the mines in the North, and gives reasons why those mines were not worked—principally owing to the inaccessibility of the country. After enumerating the disadvantages of the pure silver being sold at nearly 50 per cent. discount in the North, and the impossibility of getting supplies, he states—“Few mines, however rich, could be worked under these disadvantages, and they sufficiently account for the preference which was given by the old miners to ores that yielded 7 and 8 marcos of silver on the monton of 36 quintals, if

within 70 or 100 leagues of the capital, in lieu of exploring the tantalising wealth of the North, where, although 15 and 20 marcos were yielded by the same quantity of ore the whole profit was absorbed by usurious charges on everything else.”

If an example were needed of the remarkable richness of the mines about Chihuahua, despite these difficulties, it will be in the cathedral in that city, which was built out of a fund raised by a tax of 1 real on every marc of silver (that is 1-64th) obtained from one mine. This cathedral cost \$800,000, and we cannot do better than quote the *Times* Correspondent's account of the manner in which it was built:—“The cathedral was 100 years building. Instead of having been hoisted the stones were all carried to the top by mules. A hill was built up to the wall at the back, and on this the animals made their ascent. As the walls grew, more dirt was hauled on to the incline, and so the task was pursued to the end. When all was finished it took between two and three years to remove the hill which had been thrown up, and which by that time (as the grade could never be heavy) had extended back into the city.” In the face of such remarkable mines even the Comstock and Richmond are dwarfed. This was candidly admitted by Professor Kimball in the *American Journal of Science and Art*, in one account he gives of these mines.

Practically until recently the mines in Chihuahua were 800 miles distant from any port or means of communication, and everything had to be transferred on muleback across the mountains. The opening of the Mexican Central Railway, which was recently cabled across, has effected a complete change in this part of Mexico, and it is no secret that our cute Yankee friends have been regarding the northern part of Mexico with longing eyes for some considerable time past, and that they have been buying up some of the best of these wonderful old mines. Fortunes, doubtless, will be made and lost in this wonderful mining district as in every other country, but if due care and judgment be exercised in embarking we do not see but what results may accrue to investors which will outshine all other mining enterprises hitherto known. The richest mines in Cornwall were all originally discovered by the ancients, but in their primitive mode of working they were compelled to abandon them when their riches began, and when steam-engines were invented those who reworked them made enormous fortunes for their reworking. There is no reason whatever why under the same circumstances the same thing should not occur again in Mexico. Our forefathers generally had the ability to discover the richest spots, for the simple reason that unless mines were extraordinarily rich with their imperfect mode of working they could only attack the very richest and most important lodes.

One could scarcely believe the extraordinary mode in which the Mexican mines were formerly worked, and all these riches from Mexico obtained, were it not actually stated by such undoubted authorities. Sir Henry Ward states that “even a horse-whim would have excited almost as much astonishment as a steam-engine itself,” and that “the mines were worked as long as the water could be raised without inconvenience by two or three tenateros with leathern buckets, and abandoned when the discharge of this duty became too laborious.” These remarks are induced by a perusal of the prospectus and accompanying documents of the North Mexican Silver Mining Company, which contains some remarkable statements and extracts worthy of perusal by everyone connected with mining. It is seldom that a collection of facts so instructive is found in a prospectus, and it is suggested to all readers of the *Journal* that whether they intend investing or not a perusal of the documents accompanying the prospectus will prove both entertaining and instructive.

AMERICAN RANCHES, AND BRITISH CAPITALISTS.

THE CONSOLIDATED LAND AND CATTLE COMPANY.

The profitable character of ranching in the United States was very fully referred to in last week's *Mining Journal*, and when a company undertakes a profitable business with well-selected ranches, purchased on equitable terms, and under the control of such a board of directors as that which will manage the Consolidated Land and Cattle Company, it will be, indeed, unaccountable if great success be not speedily attained. With Lord Thurlow, the Earl of Strathmore, the Earl of Mar and Kellie, Sir G. M. Grant, and Mr. John McCulloch, with the assistance of a practical land agent, as directors, there is certainly a guarantee for integrity and judgment which should satisfy the most scrupulous investor. There are, moreover, two able consulting directors in Texas, and the officers of the company are all well-known men of business. The company, which is incorporated with a capital of 750,000l. (two-thirds of which is to be at present issued) is formed to purchase and consolidate the well-known Wren, Hittson, Millsap, and Milliken, Mann, Jackson, and Elkin cattle herds and ranches, consisting of 100,000 acres of freehold lands, 75,500 head of branded cattle, and the calf crop of 1884, estimated to number 20,000 to 25,000 head; also 1000 horses, 2000 hogs, ranche implements, equipage, improvements, &c., all in the State of Texas, U.S.A., and to carry on the business of raising cattle and other live stock in the United States of America. The directors have obtained the option to acquire all or any of the said ranches as they may see fit; and that they have a good field for enterprise is evidenced by the fact that eight or nine companies similarly engaged in the same region are paying dividends varying from 8 per cent. to 20 per cent., and averaging 12 per cent. per annum.

It might not unnaturally be asked how it happens that enterprises yielding such satisfactory profits are brought into the market, and the reply is that it is precisely by diminishing the percentage of fixed charges that the companies are enabled to make such handsome profits. The object of transferring the herds to a single company is, says the prospectus, to lessen the proportionate expenses, extend the improvements, and develop the herds, which, combined, will form one of the largest, as they are already well known to be among the best graded, herds of any magnitude in the State. The ranches proposed to be acquired by this company are admirably adapted for consolidating into one large property, because they dovetail into each other, there being no other herds or ranches between them. They occupy both sides of the Double Mountain Forks of the Brazos River for a distance of about 60 miles, and both sides of the Salt Fork of the Brazos River for 30 miles; and, as one of the best means of securing the water privileges, 100,000 acres of freehold land have been selected in good positions, thus practically ensuring the future possession of the range, which is about 3000 square miles of the finest grazing lands in the States, and estimated to be capable of maintaining easily 120,000 head of cattle. The freehold of the remainder of the range can be either leased or purchased at a moderate price should the company desire to do so later on, the expediency of which the directors will take into their consideration, and it should be noted that no payment will be made to the vendors in respect of any range rights. The position of the ranches with regard to markets is excellent. They are within 40 miles of Colorado City, on the Texas Pacific Railway, which line has in the last few years opened up such facilities as to enormously increase the demand for stock of all kinds from this district.

The reports upon the property are highly encouraging, and as the purchase takes effect from March 1 the company will have the advantage of returns at once. The calf crop for the present year estimated to number between 20,000 and 25,000 head, will, according to the terms of purchase, be the property of the company without any payment being made for them, thus increasing the number of the herd to about 100,000 head, and reducing the average cost to about \$18-75 per head; and it may be mentioned that in the herd there are about 10,000 heaves which will be ready for market this autumn, which, if sold for \$35 per head, would be \$10 per head more than is being paid for them. Mr. Robert Bruce reports that “under proper management he has not the slightest doubt that the purchase of the stock and property on the above-mentioned six ranches, at the figures named to me, must be a good investment, and that a handsome percentage on capital invested may be paid year by year, while at the end of a few years the stock will be increased in number and value at a compound ratio. This increase of stock will be better understood when he states that it can be proved that in this district of Texas over 80 per cent. of the cows will bring calves to the branding pens year after year.” Mr. Ferguson “considers that the cattle are,

on the whole, a very good lot. The range is ample, and the condition the cattle are in at present denotes that feed is abundant. He thinks there is no doubt that water is plentiful all the year round. The crop of steers for next year will be a large one, and he considers the whole property to be worth the price asked for it. Under good management it should pay good dividends, and, as it is a going concern, no great amount of money should be spent in improvements.” Mr. McCulloch says:—“Taking this range as a breeding one pure and simple and selling yearlings at present prices, \$18 to \$22 a head, the dividend would be 20 per cent., but as beef will more likely hold or advance on present prices than range cattle, I could not counsel the change unless with a provision for fattening the steers, a precaution worthy the consideration of the directors of any cattle company devoted entirely to breeding.” One noticeable fact in the reports is that they were made at different times, by parties entire strangers to each other, and while they never met or consulted with one another, yet their reports agree in the main, and differ but little from the description and facts given by the vendors. The concern altogether appears to offer an unusually good field for enterprise.

HISTORIC DERBYSHIRE COPPER MINE.

The historic celebrity of the Ecton Mine was very fully referred to in the *Mining Journal* when the company at present engaged in working it was formed, and it was then observed that at the beginning of the century Mr. John Maise, an authority of his time, states that the general produce of the Ecton Copper Mine is massive, rich, yellow copper ore, frequently in contact with galena and blende, but specimens occur of purple, steel blue, brown, or brass yellow colours. The ore yields from 40 to 60 per cent., and is sometimes vitreous and black. The famous vein of copper ore called Ecton Mine lies near Hartington, being what the Germans call stock work, and the only one in this kingdom. It is situated from the surface to the bottom in a blackish-brown limestone, the strata of which are in the greatest confusion, extremely irregular, and running in all directions.

The mine was probably worked at a very early period. It is one of the deepest in Europe, and it is now worked to the depth of 220 fms., or 1320 ft. During the time it produced the greatest quantity of ore the profits were immense. This work seems very different from the generality of veins; it has the appearance of large cavities or openings in the stratum filled with copper and other ore. This Ecton Mine is extremely productive, and at one time employed more than 1000 people. The rich ore was in amazing large heaps, being in some places 70 yards broad, in others not above 10. It was smelted at Cheadle, where coals are more plentiful; and the copper is greatly esteemed, and much in request for boilers and similar purposes, being more ductile than any other.

Since the present Ecton Copper Mines Company commenced operations, although scarcely more than three months has elapsed, the progress made has been most encouraging, and from the special report, published in another column, of Mr. T. Collingwood Kitto, who has inspected the property, the prospects really appear to be extraordinary. In all these cases the value of the report depends upon the ability and experience of the reporter, and his acquaintance with mines of the same class. The application of this test to Mr. Kitto is conclusive; not only has he had an unusually wide experience in general mining, of this the readers of the *Mining Journal* will require no testimony, but his connection with the famous Barra Barra copper district of South Australia, and the immense experience he gained there fully entitles him to be regarded as an authority upon copper mining matters. The Barra Barra Mine, which for many years was considered the richest copper mine in the world, was said to bear no resemblance to any other lode or deposit of copper ever seen up to that time, and was in the shape of an inverted cone. Some of the Ecton deposits are not unlike it in form, while others are in the form of enormous pipes from 40 to 80 fms. in length, and almost as broad as they are long; and some having been successfully followed down to a vertical depth of over 1200 ft., their durability is placed beyond a doubt.

But favourable as is this opinion it is obvious that, in Mr. Kitto's opinion, the Ecton Mine is comparatively in its infancy, for he states that in his opinion the ore bodies hitherto found are subordinate to some monster deposit. This opinion may very naturally excite surprise amongst those who have been in the habit of searching for copper in the older rocks. I am quite certain, however, that no person will question the fact that the geological formation of the Ecton Mines is unique among English copper mines, not only on account of its great richness, but from the general characteristics of the formation; and it is the nearest approach to anything of the kind which I have ever seen in connection with some of the great copper centres of Australia.

As to the work already done, Mr. Kitto's statements are in the highest degree satisfactory. He says that as regards the company prosecuting their explorations in the direction of the great central deposit, he looks upon the various galleries and shafts which have been constructed as worth to the present company fully 10,000l. The exploration of Ecton Hill is not only interesting in a scientific point, but he believes, if judiciously carried out, it will lead to the realisation of large profits. The particular characteristics of the formation render it absolutely necessary that no spot of ore, however small, should be treated with indifference, as it is highly probable that by following a string of ore no thicker than the blade of a knife it may suddenly open out into a large chamber of ore which will produce tens of thousands of tons. For full details upon the matters mentioned reference may be made to Mr. Kitto's report itself. Enough has been said to show that at Ecton there is an excellent field for remunerative enterprise.

VICTORIAN YEAR-BOOK.—The tenth annual edition of this valuable and interesting volume, prepared by Mr. H. H. HAYTER, C.M.G. Government Statist of Victoria, has just reached this country, and affords fresh evidence of the continued and satisfactory progress which the colony is making. The Customs revenue in 1882 exceeded that of the preceding year by 171,446l., the number of arrests for crimes and offences shows a gratifying decrease, and the number availing themselves of the enormous facility offered for higher education has largely increased. Some of the figures with regard to crime are very curious and suggestive. The colony has a population of 890,470, and the prisoners per 10,000 of the population are most numerous (32-00) between 30 and 40 years of age, and least numerous (4-55) under 20 years; the next decade of comparative virtue (23-02) is between 50 and 60. Again, as to nationality, Irishmen, although they form only about 10 per cent. of the population are the most criminal (39-76 in 10,000), whilst native Australians (9-90) are the least criminal. As to religion, Roman Catholics (29-56) are the most criminal, and Protestants (13-12) are the least criminal, Jews (17-89) being next to Protestants, and even Pagans (18-16) only furnish two criminals to the Catholic's three; yet the Catholics are more attentive to church than any sect except Methodists, the average attendance at the principal service being—Catholics, 78,835, out of a population of 210,070; Church of England, 52,152, out of a population of 321,453. More than half the Presbyterian population attend church regularly, but do not stand high in the criminal scale. All such facts as these afford much food for thought; and, therefore, the volume (Melbourne: the Government Printer. London: George Robertson, Warwick-square) may fairly be commended as worthy of careful and attentive study.

THE PIELER TESTING LAMP.—Diagrams and details concerning the Pieler lamp for indicating small quantities of fire-damp were given in the paper read before the Manchester Geological Society by Dr. Le Neve Foster, F.G.S., which has now been issued in the *Transactions* of the society. Since the paper was read Messrs. Dickinson and Martin, through the kindness of Mr. Woodward, have had an opportunity of testing the Pieler lamp in the Newtown Colliery. The screen for sending air by brattice to the face having been removed until the air became impregnated with sufficient fire damp to show nearly 4 in. in the Davy lamp, the Pieler was then tried, and it showed about 2 in. of cap, thus proving the very great superiority of the Pieler for testing purposes. The tests were repeated with the Davy following the Pieler with the same result.

TECHNICAL EDUCATION—INSTITUTION OF CIVIL ENGINEERS.

The annual dinner of the Institution of Civil Engineers, held at the Kensington Town Hall, on Wednesday evening, was of unusual interest not only as a social gathering, but because in the responses to the toasts facts were stated and opinions expressed to which it is impossible to attach too much importance. To indicate to a small extent the amount of knowledge and experience brought together at the dinner it may be mentioned that amongst the guests were—Dr. Acland, C.B., F.R.S. (President of the General Council of Medical Education); Prof. W. G. Adams, F.R.S. (President of the Society of Telegraph Engineers and of Electricians); Messrs. E. Bazalgette, H. Bazalgette, N. Bazalgette; A. J. Beresford-Hope, M.P.; Prof. Bonney, F.R.S. (President of the Geological Society); Messrs. E. J. Bristow (President of the Incorporated Law Society); J. A. Campbell, M.P.; Lord Justice Cotton (Vice-Chairman of the Council of Legal Education); Colonel Donnelly, R.E.; Mr. E. Dunkin, F.R.S. (President of the Royal Astronomical Society); Archdeacon Farrar, D.D., F.R.S.; Lord Justice Fry (Vice-President of University College, London); Earl Granville, K.G. (Chancellor of the University of London); Mr. William Green; Rear-Admiral E. H. Howard (Vice-President of the Ordnance Committee); Prof. Huxley, LL.D., F.R.S. (President of the Royal Society); Mr. Horace Jones (President of the Royal Inst. Brit. Arch.); the Earl of Kimberley (President of University College, London); Vice-Admiral W. G. Luard, C.B. (President of the Royal Naval College); Sir John Mowbray, Bart., M.P.; Dr. W. H. Perkin, F.R.S. (President of the Chemical Society); Sir Lyon Playfair, K.C.B., M.P., LL.D.; the Hon. W. H. Ravenscroft; Lord Reay, F.R.S. (Rector of the University of St. Andrews); Mr. Robert H. Scott, F.R.S. (President of the Meteorological Society); Mr. Coleman Sellers, of Philadelphia; Prof. Marshall, Mr. Wickham, the Archbishop of York, and many others, about 200 in all, being present.

Technical education was the subject which received the greatest prominence in most of the toasts—it is superfluous to say that the usual loyal toasts were first honoured—the first of those of a general character being "The Educational Department of the Army and Navy," in proposing which the CHAIRMAN (Sir J. W. Bazalgette, C.B., the President of the Institution) laid stress upon the educational advance of our services, and upon the necessity which these services were now under to invoke the aid of the sciences in order to ensure our holding our position among the nations. In replying, Col. Sir J. STOKES, K.C.B., R.E., bore testimony to the efficiency of the training in electricity, chemistry, and photography now given at Chatham, and to the advance made within the last quarter of a century in military education, during which time no less than 12 schools of different kinds had been established. Alluding to the system of competitive examinations, he pointed out that the cadets under that system were apt to cram rather than to study, and the great efforts of himself and his colleagues in the educational department of the army were directed towards the encouragement of study rather than what was known as cramming.—Vice-Admiral LUARD, C.B., replied for the Navy.—THE PRESIDENT next called upon Earl Granville and Sir Lyon Playfair, M.P., to respond, not for the Houses of Lords and Commons, but for "Our Chief Seats of Learning of the United Kingdom," remarking that it was not to be inferred from this departure from ordinary usage that this Institution was not a loyal body attached to the Constitution of the country. The reason of the substitution of the toast was that the Institution was not a political body, but was an Institution more immediately concerned in the advancement of education and science. Schools were being established throughout the country for the technical education of artisans and tradesmen under the auspices of their esteemed Vice-President, Sir Frederick Bramwell, which promised to raise that class and to lead to improvements in the future as far in advance of the present as the present was of the past. But our public schools and universities formed the models upon which all other educational bodies were moulded. In them most of the great men of this country had been trained for the positions they filled in after life.

The manner in which Earl GRANVILLE handled the task of replying was thoroughly characteristic; he appreciated the occasion of the meeting, and was careful to combine the liveliness which should be kept up at a social gathering with the statement of well-considered facts. He had, he said, a reason for pleasure apart from the satisfaction of intercourse with the representatives of that great profession which during this century has changed the face of the earth, and by bringing together not only the people of the same nation, but of different nations all over the world, had done more than any other class to promote civilisation and commerce. He feared that in human life the motives of self-interest sometimes gave a certain fervour even to sympathies already existing, and as he happened to depend entirely upon the extraction of coal from the mother earth, upon metallurgy, and upon mechanical engineering, he was always glad to pick up hints from those who had to do so largely with those particular materials; and he was not certain whether, had he been left entirely to his own devices, he would not on this occasion have started the ball of discussion on such points as whether really the age of iron was quite past, whether hot or even cold blast had become obsolete, and whether he individually must crown all his hopes for the future on the making of steel, which he hoped to begin making next week, and which he would not attempt to conceal from experts such as those present was certain to be of the very highest quality. But the President had most justly raised the great question of education, which more than any other bore upon the prospects of the engineering and manufacturing prosperity of the future of this country.

Being called upon to answer for the principal seats of learning, he would briefly allude to the universities of the country. He had no personal knowledge with regard to Irish University life, but had the Duke of Abercorn, the Chancellor of the Royal University of Ireland, been present, he would have been able to tell of the marvellous success of a university founded on those large and liberal principles which had governed the University of London; of the wonderful increase of students, which had doubled in the course of one year, of the great success of the female students, and, above all, of the success which so many of the male students had had in entering into the civil service of the country, and thereby creating a very powerful bond of loyalty and solidarity between the two countries. (Cheers.) If the noble and learned earl the Chancellor of the historical Trinity College were there, he would be able to speak most favourably of the way in which it followed the even tenor of its course. If he were Lord Cairns he would be much tempted to take credit for that University for the members they sent to Parliament. He did not believe there were two abler and more honourable men belonging to the great party to which he (Lord Granville) was politically opposed than Mr. Gibson and Mr. Plunket, who represented the University of Dublin; but it might cross his mind that this was a compliment which could not be addressed exclusively towards two members of an Irish University, for his friends a little to the right and left—Sir J. Mowbray and Mr. Beresford Hope—would be entitled to the same compliment from a Tory peer.

Returning from Ireland to Cambridge, his lordship continued, that with the inner life of Cambridge University, though he had the great honour of being a Doctor of Laws of that university, he was not well acquainted, but he might refer to the great movement of university extension there. He believed the pioneers at Cambridge of that movement were a few young men headed by Prof. Stuart, the occupant of the chair of applied mechanics in that university, who in an informal manner began giving lectures in some of the principal industrial centres of the North of England. A Northumbrian pitman had recently, in a few words addressed to one of these gentlemen, had said that since the visit of the Cambridge lecturers Cambridge, and all that belonged to it, had become a subject of the greatest interest to the workmen, who looked upon the class to whom the lecturers belonged with the most generous sympathy. Such words were a complete answer to the reproach which formerly might have been addressed to the older Universities—that they kept themselves coldly aloof from the life of the nation at large. Coming to Oxford, he was afraid they would think him something of a pluralist when he said he was a Doctor of Civil Law of that University. But

he was more closely connected with that University. Exactly 50 years ago he took his degree there at an age which in these degenerate times was that at which young men began their college education: Oxford, however, was a very different place of instruction now from what it was when he took his degree there. If a man so highly cultivated and eloquent as Lord Salisbury, its Chancellor, were present he could give a most satisfactory account of its extension of the means of education in science, and how Oxford had robbed from the London University their Professor of Physiology, from Cambridge a man of the greatest distinction in experimental physics, from the United States one of their greatest mathematical teachers, and from Glasgow the most distinguished botanist it possessed; while they were even now reflecting where they could best purloin a gentleman for the professorship of engineering which they were about to create. The unconscious victim of this contemplated spoliation might be in the room at that moment. The Victoria University of Manchester was, with all the headlong and vigorous characteristic of youth, adopting every mode of extending in the most practical and liberal way the advantages of education to the North of England.

London University, over which he (Earl Granville) had the honour to preside, was of so practical and business-like a character that he dared say some present were hardly aware, or had forgotten, that it had a purely poetical origin. In the 17th century not only had the poet Milton written on the development of learning, but that very ingenious poet, Abraham Cowley, had written a long essay proposing that there should be erected, within three miles of London, a College of Experimental Philosophy. Among other details, he suggested a gallery of statues of inventors. Such a gallery now would require to be of very noble proportions. He gave as the cost of the college 4000*l.* a year, and notwithstanding the difference in the value of money, that was only 1000*l.* less than the University of London cost the State. He doubted whether the State in any direction made an investment yielding such valuable results. In the original charter there were words more remarkable then than now. The king considered it was a duty of his Royal office to "encourage his subjects of all classes and of all denominations, without any distinction whatever, to follow a course of regular and liberal education." This was at a time when the illustrious Assembly to which he had the great pride of belonging had just rejected a Bill for enabling others than members of the Church of England to benefit by the education given at Oxford and Cambridge, which Universities were petitioning against the new University being allowed to give degrees. Now, however, they lived in the greatest friendship with the old Universities; and the important work of the London University had exercised a most powerful influence on the work of education throughout the country. They would observe that he had said nothing about Scotch Universities, and he was glad that the burden of that should rest on the shoulders of his right honourable friend. He had been associated with him in many different works, and he could only say that there are none in which he would not wish to be associated with him in the future. But he would be glad to give them one little warning—he is a Scotchman—and his (Earl Granville's) only request was, that if he attempts to make out that Scotch Universities are superior to English Universities they would not believe a single word he said.

After the amusing and instructive reply of Earl Granville the speeches of those who followed him appeared comparatively tame. Referring to the present competition of the world having made it necessary to promote a knowledge of science, Sir LYON PLAYFAIR observed that he would not then say anything about the Scotch Universities; he would merely state there were two classes of institutions in the country, the old Universities and the new colleges which had risen in all the centres of industry. The country had now become awakened to the importance of science, and in Manchester, Sheffield, Leeds, and other great towns new colleges of science had arisen. The old colleges had entirely altered their mode of teaching, and all the Universities had now established excellent laboratories of science. But the new colleges had not as yet that good method of teaching which was so necessary to promote success. This country must before long feel the competition of America in the industries, and if that competition was to be stemmed technological schools, such as that of Boston in the United States, must be established. There was nothing in this country to compare with that college, though he hoped the college in course of erection at South Kensington would, when finished, compare favourably with it. Not only were colleges in connection with science required, but they were also required to meet the peculiar local wants of the different districts. In some places colleges of science had been erected without a due understanding of local capabilities. It was most important that they should educate labour and enable the labourer in the future to understand what he was doing in order to meet the competition of the world; recollecting the old proverb that the wise man walks with his eye in his head, but the ignorant man walketh in darkness.

Replying to the toast of "Literature and Science," Archdeacon FARRAR responded in eloquent terms for the former, remarking that it seemed to him that the work of the literary man was even more necessary than the work of the engineer. The power of literature was as much needed in the world as the power of science. And on behalf of Science, Prof. HUXLEY said there was one educational aspect which was extremely instructive and important, and that was the insensible and almost unconscious education which was carried on upon the masses of the people by the great work of engineers and mechanicians. Whilst engineers were by their works adding to the wealth and increasing the prosperity of the country, they were also tending everywhere to cherish, stir, and develop the scientific spirit, by surrounding the people from their birth to their death with the symbols of the scientific faith.—The Archbishop of York proposed "The Health of the Chairman, and Success to the Institution of Civil Engineers," and a brief response by Sir JOSEPH BAZALGETTE brought the proceeding to a close.

THE MONTANA COMPANY.

The success which has attended the company's operations in Montana under the able superintendence of Mr. George Attwood, F.G.S., is already known to the readers of the *Mining Journal*, but they will be glad to learn that the importance of the discoveries made are quite as fully recognised in the neighbourhood of the mines as by the shareholders themselves. The Butte (Montana) Miner of March 8, under an attractive heading—"The Drum Lummon. The Ledge is Struck in the Maskelyne Tunnel," says:—All the old residents of Butte will remember with what intense interest they waited, and watched, and prayed when the Alice Company was running the 500 ft. level. Helena has experienced the same sensation in waiting for the development to be made by the Maskelyne tunnel. The ledge has been tapped, and the Helena is jubilating over the result. There is no one who does not share in its joy. The footwall was encountered last Saturday night, and the tunnel yesterday morning had cut into the lead several feet. The ore at this depth—600 ft. beneath the surface—was found to be free milling, and much superior in value to that in the old workings, some 400 ft. above. Knowing the deep interest which our citizens feel in the Drum Lummon, and all matters concerning it, a reporter last night determined to go to the fountain head for information—in other words, to interview Mr. Attwood, the superintendent of the mine. This at first thought may seem a rather difficult thing to do, when it is considered that that gentleman was at Marysville, 20 miles from Helena, and a snowstorm raging between. But the telephone was called into service, and in a moment Mr. Attwood in his office at Marysville was informed that a reporter of the Independent wanted to interview him if he was willing to submit.

The gentlemanly superintendent courteously consented, and the reporter said:—"I want to ask you about the strike in the Drum Lummon; we understand here that the Maskelyne tunnel is completed." "Yes, Sir, the tunnel is completed," replied Mr. Attwood. "Have you struck the lead?" was asked. "Yes, Sir." "How do you find it looking at that depth?" "Promising, most promising," was the reply. "How far are you into it?" "Well, as yet, we are only into it a few feet," was replied. "In ore, do you mean?" "Yes, Sir." "How does the lead at that depth compare with it above?" queried

the reporter. "It is very similar in appearance," replied Mr. Attwood—"exactly the same, I may say." "Have you made an assay of the ore found at the end of the tunnel as yet?" "Yes, Sir," was answered, "It assays \$64." "Is that as good as above?" "Yes, it is better; considerably better." "Do you intend immediately continuing the tunnel across the lead until you reach the other wall?" was asked. "Yes, Sir, that is my intention," said Mr. Attwood. "How much progress will you be able to make per day, do you think?" asked the reporter. "About 4 ft.," was the reply. "There is a good deal of water where we are now working, however, and it may delay us some time." "How long do you think it will take to reach the hanging wall?" "That, of course, depends largely on circumstances," was the reply. "The lead is believed to be 80 ft. wide, and at the rate of progress mentioned it would take about 20 days, so I will put it at from 20 to 30 days."

MEXICAN MINES AND RAILWAYS.

The development of the immense mineral resources of Mexico would be greatly facilitated by the extension of railways has been so constantly urged in the *Mining Journal*, that it is unnecessary to point out that Mexican railway enterprises are especially worthy of the support of those engaged in mining in that country; but whether a second charge will be acceptable unless to the holders of the First Mortgage Debenture Stock is a question which depends entirely upon the character of the guarantee offered that the interest will be regularly forthcoming. The price at which applications are invited is 91 per cent. for 266,500*l.* Second Mortgage Six per Cent. Debenture Stock with interest payable half-yearly. The loan will be redeemable at par by means of a cumulative sinking fund of 2 per cent. per annum (sufficient for the redemption of the loan in about 24 years), by annual drawings on March 1, the amounts drawn to be paid off on April 1 following. The first drawing will take place in March, 1885. This stock will form the second charge on all the property and revenues of the company already mortgaged as security for the 2,000,000*l.* First Perpetual Mortgage Debenture Stock, which is the only prior charge to which the stock now offered will be subject.

The present issue, producing 240,000*l.* net, is required to replace money taken from current receipts to pay for additional rolling stocks and stores, and the Mexican Government subvention, being specially applicable so far as necessary to such outlay, will be primarily employed towards the service of the loan, which is, therefore, well secured. The company's share of the subvention, which has ten years to run, is now about 80,000*l.* per annum, and although the payments to the company, which were regularly received during many years, fell greatly into arrear during the past year, they were still sufficient to meet the interest and sinking fund of this issue, independently of its mortgage on the general property and revenues of the undertaking. The price is payable by instalments extending to the end of May.

OURO PRETO GOLD MINES OF BRAZIL.—Two of the French directors and Mr. Wendeborn, the engineer of the company attached to the Passagem Mine, has, says La Liberté, been present near Palanza (Italy) at experiments made with the pyritous ores from that mine. The amalgamation, which has never been tried on this ore, was completely successful, and the result of this first trial was 2.05 ozs. of gold, about 213 frs. (8*l.* 10*s.*) to the ton of crude ore, thus obtaining 68 per cent. of the free gold contained in this ore. This process will be immediately applied in the mines in Brazil, where until now the treatment in use had given only 45 frs. (1*l.* 16*s.*) of free gold to the ton. Letters from Ouro Preto of Feb. 12 last announce that the works of opening the vein at Passagem now assure a minimum extraction of 50 tons per day. In a short time when the apparatus for this new mode of treatment of pyritous ore shall be erected, the single mine of Passagem will produce sufficient to give large returns on the whole capital of the company.

WHEAL BENNY.—As to the company having a lease direct from the Duchy for the property from which it takes its name there can be no question; the document has been brought to the *Mining Journal* office for inspection. The secretary and Mr. Brewis state that sales of the shares have been effected and transfers registered at the prices quoted, and conclude, from the excellent reports received from the mine, that it will speedily take its position in the Dividend List. They, moreover, attribute the fact that the shares are unknown in the market to the circumstance that the company is an almost private one. Hitherto only sales to the public appear to have been effected, but sellers of small numbers could probably find purchasers through one or other of the gentlemen mentioned. When the concern reaches the dividend-paying condition it will be easy to silence all opponents, as the publication of accounts, showing how the dividend has been earned, will be conclusive. The report of Capt. Cocking in another column is favourable. It should be stated that only a few small fields are leased from Mr. Lang, the greater portion of the property being from the Duchy. The grant from Mr. Lang to the company is admitted to be indispensable, so that they have the fullest confidence that no claim against them can be maintained, whatever dispute might exist between Mr. Lang and other parties.

Mr. E. BREWIS (March 28) writes:—I trust the secretary of this company and myself quite satisfied you as to the fact of H.R.H. the Prince of Wales having granted the company the lease for 20 years of this valuable property. It can be readily understood from the discovery of mineral there and the dip of the lode being the same as Devon Great Consols, of which it is a continuation apparently westward, being less than $\frac{1}{2}$ of a mile from Devon Great Consols, that envious persons should like to sow discord. Both Mr. Warrington Smyth, M.A., and Mr. Richards, the Duchy agent, whose father was the manager of the Devon Great Consols, concur as to the splendid lodes and mineral value of Wheal Benny.

WEST KITTY.—At the meeting on Thursday (Mr. John B. Reynolds in the chair) the profit of 3000*l.* on the four months' working was distributed by the declaration of a dividend of 10*s.* per share. The dividend would, it was explained, have been 12*s.*, but for the exceptional circumstance that five months' cost had to be charged against four months' returns. The report was the best ever presented, and the mine is a most prosperous one. There was a large attendance of shareholders, and of course the meeting was in every respect satisfactory. A detailed account of the proceedings will be found in another column.

NEW KITTY.—At the meeting on Wednesday (Mr. John B. Reynolds in the chair) there was a good attendance of shareholders. The agent's report was very favourable, and it was the unanimous opinion of those present that a satisfactory future was before the mine. The meeting was marked by singular unanimity; the next three months' working was provided for by the making of a call of 2*s.* per share. There were no liabilities due and unpaid, and the balance in favour of the adventurers was 163*l.* 16*s.* 9*d.* A detailed account of the meeting will be found in another column.

BRITISH ENTERPRISE IN COLORADO.—Referring to the Donaldson and Champion mill, the Colorado Mining Gazette of March 15 says: "On the right of the road to Georgetown, where the Canyon narrows at Fall River, stands the large new mill of the English company. It was started about a fortnight ago with the view of testing the machinery. Buckets are now running on the Hallide tramway from the Donaldson mine a distance of 3000 ft. They carry 130 lbs., and when at full speed move at the rate of 200 ft. to the minute. This mill is one of the largest and most complete in the region. Everything is thorough without extravagance. The ore is handled but once, and that at the mine. Thence to the mill it makes two ascents.

"The machinery consists of a Blake crusher, 15 stamps, five Frue vanners three Hartz jigs, &c. The stamps are fed by Tulloch's automatic feeders. There are two pairs of rolls and necessary sizing screens. The capacity is 40 to 50 tons a day. It is kept running night and day. The capacity can be largely increased as the output of the mine justifies it, the buildings affording ample room for such enlargement. The distance to the Champion Mine, which crowns Bellevue Mountain, is 600 ft. No elevation intervenes between the mine and the mill. Therefore, the proposed tramway will be much easier to construct than that running to the Donaldson mine.

This mill is a model, which if copied would prevent the numerous ruins that cover the country. Perfect order prevails, and the machinery meets every expectation, there being no hitch in the running. Mr. James Thomas, the machinist of the mill, was obliging in his guidance of the Gazette representative through this creditable structure. The progress of this new enterprise in its

various workings is a benefit to the mining interests of Idaho Springs, and the successful operation of the new mill will tend to swell the output of the camp, and thus help all interested in or dependent upon the leading industry of Colorado.

PERCUSSIVE ROCK-DRILLS.—Some interesting details for facilitating the selection and management of rock-drills have been published by Mr. REGINALD BOLTON, of London. He states that the selection of a rock-drill should be made with a view to its economical and regular working in the particular kind of rock which has to be bored, and although drills vary very much as to merit, the following rules may be laid down to guide purchasers, with some or all of which a rock-drill should conform. A good drill should possess durability, the best quality of material in manufacture, simplicity, accessibility, resistance to wilful damage, proper lubricating arrangements, compactness, no dead point, rapidity in boring, and economy in power used. The amount of air required for rock-drills is for a 2½ in. cylinder, 28 cubic feet; 3 in. cylinder, 38 cubic feet; and for 3½ in. cylinder, 60 cubic feet per minute. The formula for finding the weight of the blow given by a rock-drill is:—

$$\text{The Blow} = W \times R \div L \times p.$$

where W = weight of piston and drill bit, L = length of stroke in feet, R = No. of strokes per minute, p = pressure of steam at end of stroke, and n = constant .000341. Mr. Bolton's ten rules for drillers are—1. Keep your machine well oiled.—2. Keep all nuts upon it tight.—3. Do not hammer your spanner to tighten nuts.—4. Do not use the hammer on any part of the machine.—5. Keep your carriage or tunnel-post as steady as possible; it is vibration that destroys machines quickly.—6. Start the drill hole slowly till a round opening is formed, then it will go straight.—7. Do not let the drill be hammering against its front cover: you can tell when it does so by the sound.—8. Blow air or steam through the hose before coupling it up to the drill.—9. Remember it is as much the man as the machine who does the work, and do your best for the machine and it will do its best for you. And (10) have pride in your machine, and if it is not the best try and make it do the best work. The details given leave no doubt that Mr. Bolton has given considerable attention to the subject, and been careful to ascertain the character and merits or defects of the various machines in the market.

RAILWAY ENTERPRISE IN INDIA.—The activity in railway works in India continues, particularly in the North-West Provinces. The Government intend to try the experiment of sinking artesian wells in connection with these works, and have lately been shipping the necessary appliances for penetrating to a depth of 1000 feet. The apparatus has been supplied by Mr. William Speller, of London, well known as a manufacturer of the various implements required in operations of the kind.

STUDENTS' SONGS.—The volume of music published under this title by Mr. Moses King, of Cambridge, U.S., and imported into this country by Messrs. Trubner and Co., of Ludgate-hill, are precisely such a reminder of College days as many who have long since ceased to dread the *vis a voce* or the papers would like to possess. The songs were collected by Mr. W. H. Hills (Harvard Class of '80), and the taste and judgment of the selection fully justifies the ready sale the several editions have met with.

GOLD AND SILVER.—Messrs. PRILEY and ABELL (March 27) write: Since our last, the arrivals of gold have been more moderate, and the total received are as follows:—115,000z. from New York and 3660z. from Brazil. The Bank of England has received of this amount 61,000z., and has had 10,000z. withdrawn for Buenos Ayres. The Peninsular and Oriental steamer Australia has taken 35,000z., in bars, to India. A further decline has taken place in the price of silver bars since our last, and the nearest quotation we can give to-day is 50½d. per ounce. The orders for India have not been so large as expected, owing to the rise in the value of money in the East; the Banks have, therefore, experienced some difficulty in getting remittances home, and are to a certain extent out of the market for a time. The arrivals, which have been of some importance, comprise—30,000z. from Valparaiso, 33,000z. from New York, and 24,720z. from the River Plate; total, 147,720z. The La Plata takes 28,730z. to Brazil, and the Peninsular and Oriental steamers 103,000z. to India.

The quotations for bullion are:—Bar gold, fine, 77s. 9d. per oz. standard; bar gold, containing 20 dwts. silver, 77s. 10½d. per oz. standard; Spanish doubloons, 72s. 9½d. to 73s. 10d. per oz.; South American doubloons, 72s. 8½d. per oz.; United States gold coin, 76s. 3½d. per oz. Bar silver, fine, 50½d. per oz. standard; bar silver containing 5 grs. gold, 51½d. per oz. standard; cake silver, 54½d. per oz.; Mexican Dollars, 49½d. per oz. Quicksilver, 5s. 10s.; discount, 3 per cent.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, has been:—Alliance and Dublin Consumers' Maximum 10 per cent. 18½; Bahia, 10 per cent. Preference, 20½ to 25½; Buenos Ayres New (Limited), 11 to 12½; ditto, 5 per cent. Debentures, 18½ to 100½; Commercial 4½ per cent. Debenture Stock, 111; Continental Union (Limited), Original, 24; European New, 9½; Gas Light and Coke, A. Ordinary, 200½ to 202; ditto, D. 10 per cent. Preference, 22½; ditto, G. 7½ per cent. Preference, 159½; ditto, H. 7 per cent. Maximum, 143 to 143½; Imperial Continental, 192 to 196½; Monte Video (Limited), 15½ to 17; Ottoman (Limited), 4½ to 4½; Rio de Janeiro (Limited), 26½; South Metropolitan, A, 25½ to 26½; ditto, B, 21½ to 21½; ditto, Perpetual, 5 per cent. Debenture Stock, 125. Gas stocks all firm, especially Imperial Continental, which show a rise of 5 per cent.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 37½; Alliance Marine (Limited), 21 to 21½; City of London Fire (Limited), 1½ to 2½; Commercial Union, 18½ to 18½; Eagle, 6½ to 6½; Employers' Liability Assurance Corporation (Limited), 2½ to 2½; Guardian Fire and Life, 59 to 60½; Indemnity Marine, 14½ to 14½; London and Provincial Fire, 4½ to 4½; ditto, ditto Marine (Limited), 4½ to 4½; North British and Mercantile, 27 to 27½. Insurances very little doing. Fire companies flat on reports, which mostly show a loss for the year.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. WM. ANNOTT, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

RAILWAY AND GENERAL MARKETS.—Referring to the course of business done to-day during official hours (11 to 3) Mr. Ferdinand R. Kirk Birchington, writes:—Opening: The markets are very flat for Grand Trunks and American railway shares. French Secondaries are only 65½ to 65½, a fall of 1½, the Thirds being 25½ to 25½, a fall of ½. The Ordinary are quoted 11 to 11½. Eries are only 21 to 21½, and Readings 27 to 27½. Yesterday Eries were dealt in at 22½. Atlantic First Mortgage have fallen 1½, to 40½. Hull and Barnsley Railway, 4 to 4½. Great Eastern, 62½ to 62½. Mining shares are fairly steady. At the West Kitts meeting, yesterday, a dividend of 10s. per share was declared. Shares are quoted 12½ to 13. Old Shepherds, 20s. to 22s.; Home Mines Trust, 14s. to 15s.; East Wheel Rose, 21 to 21½; Mounts Bay, 4s. to 6s.; Bratsberg, 1½ to 1½; Montana, 3½ to 3½; Transvaal, 1½ to 1½; United Mexican, 10½ to 10½. Wheel Crebor, 1½ to 1½. Closing: A very decided rally took place in Grand Trunks soon after the opening, on the issue of the revenue statement for January and February, showing a profit of \$20,580 for these two months. The Secondaries rose rapidly to 73½, now 73 to 73½, the Thirds being 31½ to 31½, and the Ordinary 12½ to 12½. American lines are from ¼ to ½ better, in sympathy. Richmond 3 to 3½; Mason and Barry, 18½ to 18½; Rio Tinto, 18½ to 18½; Copiapo 2½ to 2½; Colorado, 2½ to 2½; Prince of Wales, 6s. to 6s.; Victoria Gold, ¾ to ¾.

THE MINING RECORD, Only \$5.00 a year.

Foreign Postage.
61, BROADWAY, NEW YORK.
the ONLY PAPER in the United States that gives FULL LATEST ACCOUNT from all the GREAT GOLD, SILVER, IRON, and COAL MINES of AMERICA.
ORDERS EXECUTED FOR MINING STOCKS. Information free
ALEX. ROBT. CHISOLM, Proprietor.
London Office—H. CARTER, Manager, 36, King William-street, London.

SMALL ENOUGH TO CARRY IN THE POCKET ANEROID CASE.
PRACTICAL HYPOMETRY: A Method of DETERMINING ALTITUDES (Heights of Mountains and Depths of Mines) accurately and almost instantaneously, with the Aneroid Barometer, WITHOUT TABLES.
Price One Shilling, post free
London: MINING JOURNAL Office, 26, Fleet-street, E.C.

HALF-PRICE—ONE SHILLING POST FREE.
A few copies with the covers slightly soiled of the
ENGLISH AND FOREIGN MINING GLOSSARY:
To which is added the SMELTING TERMS used in FRANCE, SPAIN, and GERMANY.
London: Published at the MINING JOURNAL Office, 26, Fleet-street, E.C.; and all Booksellers.

THE IRON AND COAL TRADES REVIEW
The IRON and COAL TRADES REVIEW is extensively circulated amongst the Iron Producers, Manufacturers, and Consumers, Coalowners, &c., in all the iron and coal districts. It is, therefore, one of the leading organs for advertising every description of Iron Manufacturers, Machinery, New Inventions, and all matters relating to the Iron Coal, Hardware, Engineering, and Metal Trades in general.
Offices of the Review: 842, Strand, W.C.
Remittances payable to W. T. Fringle.

FURTHER ISSUE of 50,000 SHARES of £1 each, completing the 150,000 Shares first to be issued. Price of Issue, Par, or £1 per Share, payable 2s. 6d. per Share on Application; 2s. 6d. on Allotment; 5s. on 1st May, 1884; 5s. on 1st June, 1884; 5s. on 1st July, 1884. Total, 20s.

THE LISBON-BERLYN (TRANSVAAL) GOLD FIELDS (LIMITED).

Incorporated under the Companies Acts, 1862 to 1880, by which the liability of the Shareholders is strictly limited to the amount of their Shares.

CAPITAL £500,000, in 500,000 SHARES OF £1 EACH, Of which 150,000 are first to be issued, of which 100,000 Shares have been applied for and allotted to 1045 Shareholders, 300,000 Shares are appropriated in part payment of the properties, and 50,000 Shares are reserved for future issue.

BOARD OF DIRECTORS.

Baron ALBERT GRANT (Messrs. Grant and Co.), Founders' Court, Lothbury, E.C., CHAIRMAN.
Sir FRANCIS C. KNOWLES, Bart., M.A., F.R.S., Mayfield, Ryde, Isle of Wight.

JAMES EDMUND GLINISTER, Esq. (late Gold Commissioner for the Transvaal Government) City Bank Chambers, E.C.
JAMES ROCK, Esq., J.P. (Chairman of the Phosphor-Bronze Company, Limited), Clare House, Tonbridge.

The Honourable DAVID ERSKINE (late Colonial Secretary of Natal), 47, Grafton Road, Kensington.
HUGH GWYNNE-OWEN, Esq., Kimberley and Transvaal, and 3, Park Place, St. James, S.W., Resident Director.

SOLICITORS—Messrs. GEORGE DAVIS, SON, and CO., 80, Coleman Street, E.C.

AUDITORS—Messrs. J. F. LOVERING and CO., 77, Gresham Street, E.C.

THE CAPITAL AND COUNTIES BANK (LIMITED), 39, Threadneedle Street, E.C.

THE STANDARD BANK OF SOUTH AFRICA (LIMITED), 10, Clement's Lane, E.C.

SECRETARY—Mr JOHN DAVIES.
OFFICES—110, CANNON STREET, E.C.

RESIDENT STAFF AT THE MINES.
CHIEF MINING MANAGER—Mr DWIGHT CRITTENDEN.

COMMERCIAL MANAGER—Mr CECIL GUINNESS.
CHIEF ENGINEER—Mr J. B. FRYER, A.M.I.C.E.

MINERALOGIST, GEOLOGIST, and ASSAYER—Prof. M. FORSTER-HEDDLE, M.D., F.R.S. Edin.: President of the Mineralogical Society of Great Britain and Ireland; Past President of the Geological Society of Edinburgh, and Professor of Chemistry in the University of St. Andrews.

ASSISTANT ENGINEER—Mr ALFRED ATTENBOROUGH, C.E., A.S.I.

ACCOUNTANT—Mr COSMO MORGAN.

AGENTS AND AUDITORS IN THE TRANSVAAL.
Messrs. SIMPSON and SCHAPPERT, Pretoria, Transvaal.

BANKERS IN THE TRANSVAAL.
THE STANDARD BANK OF SOUTH AFRICA (LIMITED), Pretoria, Transvaal.

The directors of the above company are prepared to receive applications for 50,000 shares, part of 150,000 shares to be first issued, as above stated.

Under the prospectus issued in December last and up to this date 100,000 shares have been applied for and allotted, and are now held by 1045 shareholders.

The Lisbon and Berlyn properties, as stated in the original prospectus, contain upwards of 18,000 acres.

The progress made with reference to sending out the machinery and organising the staff has been very great, and the arrangements for early working may be said to be practically completed.

The most complete mining plant obtainable has been sent out, and a most efficient staff engaged by the company through the good offices of Professor Price, the well-known expert of San Francisco.

The whole of the staff should be on the Gold Fields about the end of next month, and the machinery in about one month later, and it is confidently expected that within three months afterwards the first shipment of gold will be made.

The prospectus and details of this company have been so recently before the public that the directors do not feel it necessary to repeat all that has previously been said. Any person desirous of having an original prospectus can obtain it from the secretary.

The directors content themselves with repeating that the properties have been reported upon by the following engineers, from whose reports short extracts are given:—

1. John M. Stuart, Esq., M.Soc. Arts, F.R.G.S.
2. John Webster, Esq.
3. John J. Hamilton, Esq.
4. W. Henry Penning, Esq., F.G.S., Memb. Soc. Arts.

With such a consensus of opinion it seems difficult to withstand the belief that in the Lisbon and Berlyn Gold Fields prospects of profit are opened out of unusual magnitude. It is not necessary that the full result shadowed forth by Mr. Stuart should be realised—viz., £19,000,000 sterling net, for if it did each £1 share would be worth nearly £40. If one-fourth of the results are attained, the properties would still be one of the most extraordinarily rich and profitable ever offered to the public for subscription.

Applicants for the present issue of shares, which are identical in all respects with those already issued, have the advantage of now joining the company, with the knowledge that all the machinery is made and en route for the properties, that the staff has landed, and should shortly be on the works, and that all arrangements are complete for early working, so that the usual preliminary period of suspense which is always so trying in mining matters has passed, and results may be confidently expected within a few months.

In the allotment of shares all applications up to 100 shares will be allotted in full, and those beyond (in the event of there being a larger number applied for than have to be allotted) will be reduced *pro rata*.

The printed copies of the reports referred to herein can be seen at the offices of the company. The contracts and the Articles of Association can be seen at the offices of the solicitors of the company.

Forms of Application can be obtained of the secretary at the offices of the company.
By order of the Board,
JOHN DAVIES, Secretary.

110, Cannon-street, E.C., March 25, 1884.

Enclosed is a verbatim report of the Statutory Meeting of Shareholders, held on Saturday, the 22nd instant, also extracts from South African Newspapers relating to the gold fields, which will be of interest to intending applicants.

The LIST of SUBSCRIPTIONS was OPENED on WEDNESDAY, 26th instant, and will CLOSE on WEDNESDAY, 2nd April.

MINING PROPERTY AND PLANT FOR SALE.
TO BE SOLD, BY TENDER, as a GOING CONCERN, the KIRK MICHAEL MINE.

The leasehold premises known as the Kirk Michael Mining Company (Limited), situate in the parish of Michael, in the Isle of Man, including the PLANT and MACHINERY, is offered FOR SALE BY TENDER. The property is held under lease for a term of 21 years from the 5th April, 1867, at a dead rent of £25 per annum, merging into a royalty.

Particulars and conditions of sale can be seen at the offices of Messrs. STACPOLE and SON, Plinners' Hall, Old Broad-street, London, E.C.; and of Mr. EDWARD ASHMEAD, the Liquidator of the said company, 2, Drapers' Gardens, London, E.C., where an inventory of the plant and machinery can be inspected. All persons tendering shall be taken to have full knowledge of the aforesaid particulars and conditions of sale, and to have their tender subject thereto, and shall be bound thereby.

Tenders to be sent to Mr. EDWARD ASHMEAD, 2, Drapers' Gardens, London, E.C., on or before the 14th day of April, 1884.

CLOSING OF THE LISTS.

THE LAND AND LOAN COMPANY OF NEW ZEALAND (LIMITED).

The LIST of APPLICATIONS for SHARES will be CLOSED on FRIDAY, April 4, for TOWN, and SATURDAY, April 5, for COUNTRY.
London, March 28, 1884.

THE LAND AND LOAN COMPANY OF NEW ZEALAND (LIMITED)

CAPITAL £1,000,000, in 200,000 SHARES OF £5 EACH.
(with power to increase).

The liability of the shareholders is limited to the amount of their shares.

FIRST ISSUE, 100,000 SHARES, upon which £1 per share will be called up as follows, viz.:—2s. 6d. per share on application; 2s. 6d. per share on allotment; 5s. on 1st May, 1884, and the remainder in sums of 5s. per share as required, at intervals of not less than two months between each call, of which at least 30 days' notice will be given. Of these shares the directors and their friends will take 44,000.

DIRECTORS.

*JAMES ALEXANDER, Esq. (Redfern, Alexander, and Co., Australian and New Zealand Merchants), 3, Great Winchester-street, E.C., Director, Bank of Australasia.

WILLIAM DUNLOP ANDERSON, Esq. (Anderson, Fairley, and Gray), 37A Mincing-lane, E.C., Director, Alliance Bank (Limited).

ALFRED CHETHAM-STRODE, Esq., late Director of the Colonial Bank of New Zealand (Limited), and late member of Committee in New Zealand of the Otago and Southland Investment Company (Limited).

Lieut.-General RICHARD STRACHEY, R.E., C.S.I., F.R.S., Stowey House, Clapham Common.

ROBERT THORBURN TURNBULL, Esq. (R. T. Turnbull and Co., Australian and New Zealand Merchants), 5, East India-avenue, E.C., Director, Imperial Property Investment Company (Limited).

WILLIAM CARR YOUNG, Esq. (of Bell, Harrison, and Co.), 11, Clement's-lane, E.C., and formerly of Dunedin, N.Z.

COLONIAL BOARD IN NEW ZEALAND.
MANAGING DIRECTOR IN NEW ZEALAND—*FRANCIS C. FULTON, Esq., Napier, N.Z.

The following gentlemen will act provincially:—
The Hon. G. RANDALL JOHNSON, M.L.C., Wellington, N.Z.
GEORGE BEETHAM, Esq., M.H.R., Napier, N.Z.
EDWARD JOLLIE, Esq., J.P., Patea, N.Z.

BANKERS.
In London—The ALLIANCE BANK (Limited), and its Branches.

In New Zealand—The BANK of AUSTRALASIA, and its Branches.

SOLICITORS IN LONDON—Messrs. MERRIMAN, PIKE, and MERRIMAN, 25, Austin Friars, E.C.

AUDITORS—Messrs. TRIBE, CLARKE, PAINTER, and CO. 2, Moorgate-street-buildings, E.C.

SECRETARY—M. W. C. GOULD.

OFFICES—3, GREAT WINCHESTER STREET, LONDON, E.C.

*These gentlemen will join their respective boards after the allotment of shares.

ABRIDGED PROSPECTUS.

The company has been formed with the objects stated in the Memorandum; briefly they are for the following purposes, viz.:—

1.—The lending of money upon security of mortgages of freehold, leasehold, and other property in New Zealand, and making advances against produce or consignments.

2.—The purchase, management, and resale of freehold or leasehold lands in New Zealand and of stock and produce in connection therewith.

3.—The conduct of a General Agency business, comprising the management of funds which may be sent to New Zealand for investment, the collection of dividends and other moneys, and the care of consignments to and from New Zealand, and their realisation, with power to advance against such consignments.

Mr. F. C. Fulton (who has had more than 20 years' experience in the management of properties in New Zealand) is to act as managing director in the colonies, and will make a substantial investment in the company's funds.

Favourable arrangements have been made with the well-known firm of Messrs. Redfern, Alexander, and Co. (Australian and New Zealand merchants), who will attend to all the mercantile part of the company's business in this country, whereby considerable expense will be saved.

No promotion money is being paid.

Full prospectus and Forms of Application may be obtained at the offices of the company, as well as from the company's Solicitors, Bankers, or their Agents.

INVESTORS' PROTECTION AGENCY.

THIS AGENCY IS ESTABLISHED TO SUPPLY INDEPENDENT, RELIABLE, and UNBIASED REPORTS on all properties by experienced experts, and should be consulted before investing.

This Agency will also SUPPLY MINING PLANT, MACHINERY, STORES, &c., of the VERY BEST description at the lowest possible prices.

For terms and prices address—
JOHN L. M. FRASER, M.E., Manager, GREENFIELDS, WREXHAM.

HERBERTON (WILD RIVER) TIN LODES, NORTH QUEENSLAND.

Every information relative to the progress of lode-tin mining in the Wild River district (termed by geologists "The Cornwall of Australia") can be obtained by communicating with the undersigned.

CHARLES JENKIN.
"Herberton Advertiser" Office, Herberton, September, 1882.

TO MINING ENGINEERS.

WANTED SHORTLY, a THOROUGHLY COMPETENT MAN to TAKE CHARGE of a valuable MINING PROPERTY in AMERICA. He must have unexceptional references as to ability and practical knowledge of all the latest Mining Machinery. A liberal salary is proposed, partly to be paid by results.

Address, stating references and past engagements, to LIDIARD and SON, 41, Parliament-street, S.W.

WANTED, a MANAGER of a LEAD WORKS.

A good Lead Smelter and Manufacturer, having a practical acquaintance with Sheet Rolling, Pipe, Red Lead, and Shot Making, accustomed to Assay for Lead and Silver, and to have charge of men. He should have a fair knowledge of accounts, and be able to check the working books of the concern; but would have nothing to do with the sales department. A house, but no other perquisite given: Replies must state salary, and enclose copies of testimonials.

Address, "L. M.," MINING JOURNAL Office, 26, Fleet-street, E.C.

WANTED, a LONDON SECRETARY for a Cost Book Cornish Tin Mine in good district, and exceptionally favourable working conditions.

Address, "Investor," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

THE KIRK MICHAEL MINING COMPANY (LIMITED) IN LIQUIDATION.

ALL PERSONS claiming to be CREDITORS of the ABOVE COMPANY are required, on or before the 14th day of April prox., to SEND in their NAMES and ADDRESSES and PARTICULARS of their CLAIMS, addressed to Mr. EDWARD ASHMEAD, the Liquidator of the Kirk Michael Mining Company (Limited), 2, Drapers' Gardens, London, E.C.; or, in default thereof, will be EXCLUDED from the BENEFIT of ANY DISTRIBUTION made before such debts are proved.

Dated the 28th March, 1882. EDWARD ASHMEAD, Liquidator.

C. E. HALL, MEERSBROOK BANK.

SHEFFIELD.

Makes a Speciality of the following Machinery suitable for Mines Collieries, &c.:-

THE "MULTIPLE ACTION" CRUSHER.

THE PATENT SECTIONAL CRUSHER in STEEL and Cast iron for FOREIGN TRANSPORT.

THE EXCELSIOR ELEVATOR AND CREEPER.

THE ECLIPSE DRIVING CHAINS, instead of Gearing and Belting—POSITIVE DRIVING.

THE UNIVERSAL PULVERISER, for reducing Ores, Quartz, Lime, Phosphates, Cement, &c.

PATENT CORNISH CRUSHERS, with Hall's Patent Universal Tension Springs, instead of Levers and Weights.

Coal Washing and Dressing Machines for Coke Making.

THE SMALL COAL IS DRIED AS IT PASSES OFF THE MACHINE.

Wet Coal Grinding Machines, Coal and Slack Elevators, &c.

Write for Catalogues.

MINING ENGINEER.

ALEX. DEL MAR,

Mining Engineer, late Director of the United States Bureau of Statistics, Mining Commissioner for the United States Monetary Commission, &c.

120, SUTTER STREET, SAN FRANCISCO.

Cable Address: "Delmar, San Francisco."—Branch Office: 81, Broadway, New York.

References: Messrs. LAZARD BROTHERS and Co., 60, Old Broad-street, London.

ALEX. KERLY, Esq., 14, Great Winchester-street, London;

and numerous others.

WM. BREDEMAYER,

Mining, Consulting, and Civil Engineer,

56, EAST FIFTH SOUTH STREET,

SALT LAKE CITY, UTAH,

United States Mineral Surveyor for Utah and Idaho, Notary Public, Geological Examinations, Reports on Mining Properties; Surveys Mines, Railroads, and Canals, and Superintends the Workings of the same. Prepares Estimates and Plans for Opening and Working Mines. Expert on Mining Questions before the Courts.

Address, P. O. Box, 1157, Salt Lake City, Utah.

ALEXANDER SMITH, M. Inst. C. E., CONSULTING

ENGINEER and VALUER of IRONWORKS,

MINING, RAILWAY, ENGINEERING, and other PROPERTY,

PLANT, and MACHINERY,

PRIORY STREET, DUDLEY

4, BURLINGTON CHAMBERS, NEW STREET, BIRMINGHAM

Mr. SMITH has been retained for nearly 20 years by some of the most prominent firms, and has conducted many of the largest valuations that have taken place in the kingdom.

Valuations for Stock Taking or any other purpose upon very reasonable terms

BRENTON SYMONS, F.C.S., Assoc. Mem. Inst. C.E.,

CONSULTING MINING ENGINEER.

On his return from the Algerian Mining Districts, will be prepared to undertake the INSPECTION—geologically or otherwise—of MINERAL PROPERTIES at home or abroad.

Eighteen years' experience in the Management of Gold and Copper Mines (both by Wet and Dry Reduction) in Central America, Venezuela, Hungary, Turkey, &c.

THOMAS CORNISH, CONSULTING MINING ENGINEER.

Mines Inspected and Reported on. Advice on Mining Management and Investment.

Twenty-five years' practical experience in Australia.

Author of "Gold Mining: its Results and its Requirements"—"Our Gold Supply: its Effects on Finance, Trade, Commerce, and Industries"—"A Trip to Colorado," &c.

Address, care of MINING JOURNAL Office, 26, Fleet-street, London, E.C.

MESSERS. CUNLIFFE, ENTWISLE, AND CO.,

FINANCIALISTS,

MINING AND CONSULTING ENGINEERS,

MINERAL ASSAYERS,

STOCK AND SHARE BROKERS,

77, BLOOMSBURY, OXFORD STREET; AND 2, UPPER BROOK STREET, MANCHESTER.

Bankers: Manchester and Oldham Bank (Limited), Fall Mall, Manchester.

JOHN ROBERTSON, F.S.A., MINING AND CONSULTING

ENGINEER, LAS VEGAS, NEW MEXICO.

Mines and Mining Claims carefully examined, Assays made of their Ores, and reliable Reports furnished.

Mining Properties bought and sold on commission. Has special facilities for inspecting properties in Mexico.

References by permission:—L. P. BROWN, Esq., Las Vegas, New Mexico; Don F. A. MANZANARES, Las Vegas, New Mexico; His Excellency H. M. HOTT, Governor of Pennsylvania, Harrisburg, Pa.; H. S. PIERCE, Esq., Banker, Scranton, Pa.; Hon. JOHN HANDLEY, President Judge 45th Judicial District, Scranton, Pa.; N. H. SHAFER, Esq., Cashier Third National Bank, Scranton, Pa.; E. B. STURGES, Esq., Attorney-at-Law, Scranton, Pa.; E. W. WESTON, Esq., General Agent Delaware and Hudson Canal Company, Providence, Pa.; Hon. Sir JOHN F. CLARKE, Baronet, Tulliebrannich, Aberdeenshire, Scotland; R. L. CHANCE, Esq., Birmingham, England; PERCYVALE TAYLOR, Esq., of John Taylor and Son, 6, Queen-street-place, London. JOSEPH ROBERTSON, Esq., 17, Tokenhouse-yard, London.

A PRACTICAL MAN is OPEN for an ENGAGEMENT as MINE

MANAGER, PROSPECTOR, or AMALGAMATOR. Twenty years varied experience.

Apply to "Fact," MINING JOURNAL Office, 26, Fleet-street, E.C.

ZINC ORES

WANTED, POOR BLENDED ORES.—

Send samples and full particulars to "J. M.," care of House-keeper, 27, Mincing-lane, London, E.C.

AGENTS WANTED to PUSH FIRST-CLASS MACHINERY

OILS, commanding a large and increasing sale. Liberal commission.

Apply, "Box 201," Post Office, Liverpool.

WANTED, a FEW CAPITALISTS to join in SECURING some

very valuable GOLD MINING and LAND PROPERTIES, from which large profits can be made.

For particulars apply to THOMAS CORNISH, M.E., care of MINING JOURNAL Office, 26, Fleet-street, E.C.

GOLD MINING ASSISTANT MANAGER, SUPERINTENDENT of WORKS, or ERECTOR of MACHINERY—

WANTED place as above. Good Draughtsman, and well up in Machinery for the Reduction of Gold, Silver, Lead, &c.

Address, G. THOMAS, 1, Broad-street, Newent, Gloucestershire.

A GENTLEMAN of 27 years' practical experience in Gold, Silver, Copper, Tin, and Lead, is OPEN to RE-ENGAGEMENT.

Copies of testimonials on application to "W. G.," 9, Addington-place, Liskeard, Cornwall.

ADVERTISER can PLACE PYRITES and PHOSPHATES

readily. Also Blende, Lead, Silver, and Mixed Ores.

Only Mineowners need reply to "H.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO BE LET, the BANTRY BAY BARYTES MINE, in the

County of Cork, Ireland.

For particulars, apply to FRANCIS FITZMAURICE, Solicitor, Dunmanway, Co. Cork.

Just published, royal 8vo, price £1 15s. cloth.

MACSWINNEY ON MINES, QUARRIES, AND MINERALS.

THE LAW OF MINES, QUARRIES, AND MINERALS. By

R. F. MACSWINNEY, M.A., Barrister-at-Law. Lord BRAMWELL in the case of Love v. Bell, says:—"This is well put, indeed the subject generally and the questions that arise in this case are very well treated in Macswinney on Mines, &c."

London: W. MAXWELL and SON, 8, Bell Yard, Temple Bar.

In the Court of the Vice-Warden of the Stannaries.

Stannaries of Devon.

IN the MATTER of the COMPANIES ACTS, 1862 to 1880, and of the RUSSELL COPPER MINE (LIMITED).

TO BE SOLD, under the direction of the Registrar of the said Court, on Wednesday, the 2nd day of April next, at Eleven o'clock in the forenoon, at the Russell Copper Mine, near Tavistock, within the said Stannaries, in One or more Lots, as shall then and there be determined on, and subject to such conditions as shall be then and there produced, the WHOLE of the undermentioned

MINING MACHINERY, MATERIALS, AND EFFECTS

Of and belonging to the said company:—

ONE 7 horse PORTABLE ENGINE; horse wheel; shaft tackle; 40 feet shears, with pulleys; shaft bob; balance bob; one 4 inch square wrought shaft, with crane; tooth wheel bearing blocks; pitwork, about 30 tons, consisting of 8 and 9 inch pumps; 4 feet 8 by 8 matchings; 5 feet by 8 windbore; 9 feet by 6 ditto; 10 feet by 5 workings; one 5 inch doorpiece; one 6 inch ditto; three tram wagons; whin kiddles; winze kiddles; 30 fathoms 2 inch wire rope; 53 fathoms 2½ by ¾ tramroad; 170 fathoms of railroad; several wood sheds; smiths' and miners' tools; new and old iron; borer; borer steel; Norway and other timber; and sundry other effects generally in use in mines; together with the account house and office furniture.

To inspect the above apply to the Bailiff in charge at the mine; and for further particulars at the office of the Registrar.

HODGE, HOOKIN, and MARRACK, Truro.

(The Solicitors having the carriage of the proceedings in the said Matter.)

Dated Registrar's Office, Truro, March 20th, 1884.

ON SALE (CHEAP), TO CLEAR THE GROUND, GARSWOOD PARK AND LAFFAK-GARSWOOD COLLIERIES, ST. HELENS, LANCASHIRE.

THE ABOVE COLLIERIES, belonging to Messrs. David Bromilow and Co., being worked out, the WHOLE OF THE PLANT IS

NOW OFFERED FOR SALE, BY PRIVATE TREATY, and consists of—

ONE SINGLE HORIZONTAL WINDING ENGINE, 30 in. cylinder, Cornish valves, 5 ft. 6 in. stroke, and 12 ft. drum for round ropes, and steam brake, by Robinson and Cook.

HORIZONTAL ENGINE, 24 in. cylinder, piston valve, 4 ft. stroke, 18 ft. fly-wheel, spur wheels for pumping, 3 to 1 pumping wheel, 14 ft. diameter, dice slide, rod, and L leg, by Coupe Brothers.

HORIZONTAL ENGINE, 18 in. cylinder, slide valve 4 ft. stroke, 12 ft. fly-wheel, spur wheel 9 in. on face, single pumping crank 10 in. square, 4 ft. stroke, slide rod, L leg.

HORIZONTAL ENGINE, 14 in. cylinder, slide valve 24 in. stroke, fly wheel, 9 ft. spur wheel and drum.

Also, BOILERS, and several other SMALL ENGINES, LOCOMOTIVE, MACHINERY, LATHES, PLANING and DRILLING MACHINES, TURNING and FITTING TOOLS, several large and small SAW BENCHES, THREE HUNDRED AND FORTY 6 and 8 ton WAGONS, NINETEEN RIVER FLATS (rigged), and about 2500 tons of good CANNEL, &c., &c.

For catalogues and further particulars, apply to D. BROMILOW and Co., Garswood Park Colliery, St. Helens, Lancashire.

PENHALLS MINE, ST. AGNES, CORNWALL.

MR. W. T. DAVEY, Auctioneer, Redruth, has been favoured

with instructions TO SELL, BY PUBLIC AUCTION, at Tabb's Hotel, Redruth, on Tuesday, April 2nd, 1884, at 3 o'clock in the evening, precisely (free of commission), under such conditions as will then and there be produced and read, the

PENHALLS MINE,

With the MACHINERY and MATERIALS, and the LEASES under which it is worked, as a going concern, in One Lot. THE PLANT thereon comprises:—

ONE good 50 inch cylinder PUMPING ENGINE, with first place of rod and caps, and TWO BOILERS, about 10 tons each, and fittings; balance and angle bobs, shears, and shaft tackle.

ONE 36 inch double acting ENGINE, with fly wheel, crank, &c.

ONE excellent 11 ton BOILER.

ONE 20 inch WINDING ENGINE, cage, fly wheel, &c.; and 1 8 ton BOILER and fittings.

Capstans, &c.; iron bob; dry tube.

Four stamps axes, frames, horses, lifters, &c.

Boiler tubes, plates, &c. (about 16 tons), sundry pulleys, &c.

Powerful winch, lifting jack, three shaft tackles, &c.

100 fathoms 11 inch rods and plates.

Two 11 inch plunger Poles, two 9 inch ditto.

About 80 fathoms of 14 inch pitwork, complete.

Iron rods, buddle gear, railroad iron, whin rope, large beam, scales, and weights, smiths' and miners' tools in variety, wood sheds, launders, new and old iron, new and useful timber, and a variety of articles in general use in mines.

The above plant is of good description, and in thorough working order.

The mine is situated near the town of St. Agnes, and adjoining West Wheel Kitty, one of the best dividend-paying mines in Cornwall.

This mining property is in a great tin-bearing district, and has yielded immense quantities of ore, and formerly paid large profits to the shareholders.

Considering that the 80 fathom level is the deepest point, the water charges light, and the little work done at this point, it is very probable by sinking a little deeper, together with a moderate outlay, Penhalls would prove a great success.

To view, apply to the Manager, Captain S. BENNETT, on the Mine; and for further particulars to Messrs. P. B. and Son (the Purchasers), Camborne; or at the offices of the Auctioneer, 4, Station Hill, Redruth.

PIT SINKING, WINDING COAL, PUMPING, &c.

PORTABLE STEAM ENGINE FOR SALE, with two 9½ inch cylinders, and link motion reversing gear also gear to wind and pump.

A 9 H.P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required).

A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.

Apply to—

BARROWS and STEWART, ENGINEERS, BANBURY.

IMPORTANT TO MINE OWNERS.

FOR SALE, a PLANT of ROCK-DRILLING MACHINERY,

quite new, comprising—

ONE AIR-COMPRESSING ENGINE, with 12 inch cylinders, 3 and 3½ in. rock drills, stretcher bars, &c., &c. Our Machines have been driving levels in hard rock 3 to 4 fathoms per week forward.

Contracts undertaken.

Address,—WARSON AND HILL, NOTTINGHAM

COPPER WORKS.

TO BE SOLD (as a going concern), at Mostyn, on the banks of the Dee, a valuable COPPER WORKS for Smelting or for the

Extraction of Copper and Silver by the Wet Process. In addition to the production of Copper, both Iron and Silver are recovered. The

Works contain eight calcining furnaces heated by gas, condensing towers for acid, crushing mill, pumping engines, &c., 35 copper precipitating and silver deposit tanks, a refinery for smelting copper, siding to railway, collieries adjoining the works, ample room for extending, an almost unlimited space for deposit of waste.

For particulars apply, by letter, to the EYTON COPPER WORKS, Mostyn, N.W.

TO GAS AND WATER COMPANIES, CONTRACTORS, AND OTHERS.

THE VENTNOR GAS AND WATER COMPANY have FOR

SALE ONE OF BLAKE'S PATENT STEAM PUMPS. Size, steam cylinder 10 inch, water cylinder 6 inch, stroke 18 inch, with gun metal valves, air vessel, &c., &c., in thorough good working order.

Further particulars may be obtained by application to J. S. INESON, Engineer and Secretary, Gas and Water Offices, Ventnor, Isle of Wight.—March 25, 1884.

FOR SALE, the LLANHILLETH COLLIERY, the property of

HENRY POWELL, Esq., situate on the Western Valleys Branch of the Great Western Railway.

The situation of this property is in one of the best positions in Monmouthshire, within 13 miles of Newport, the port of shipment, and commands a large area of minerals, both the Bituminous and the Steam Coal Measures. The colliery is now in full work on the House Coal Measures.

There is also a pit sunk about 80 yards, fitted with very powerful pumping and winding engines and gear, suitable for winning and working the Steam Coal, a very large area of which, although not already taken, can be secured on very favourable terms.

For full particulars, apply to Messrs. BROWN and ADAMS, Guildhall Chambers, Cardiff; and to view the Colliery, to Mr. JEREMIAH, Llanhilleth Colliery, Crumlin, near Newport, Monmouthshire.

STEAM BOILERS FOR SALE, SECONDHAND, with and without Galloway Tubes, single and double rivetted, working pressure of 80 lbs., 65 lbs., 70 lbs., and 80 lbs. steam pressure. VERY CHEAP.

SIX BOILERS, 30 feet by 7 feet 5 inches diameter excellent order.

FOUR BOILERS, 28 feet by 7 feet " " "

THREE BOILERS, 26 feet by 7 feet " " "

FOUR BOILERS, 24 ft. by 6 ft. 8 in. " " "

And other sizes in stock. Equal to new.

WINDING ENGINES and COLLIERY PLANT of every description, second hand, in stock. VERY CHEAP. Write to—

H. HELLWELL and CO., 4, NORTH CORRIDOR, ROYAL EXCHANGE, MANCHESTER.

UNITED MEXICAN MINING COMPANY (LIMITED).

3, Great Winchester-street Buildings, London, E.C.

Notice is hereby given, that a GENERAL MEETING of the company will be HELD on WEDNESDAY, the 18th day of April, 1884, at Twelve o'clock, at the Guildhall Coffee House, Gresham-street, London, for the purpose of confirming, as Special Resolutions of the company, the Resolutions passed at the meeting of the company held on the 24th day of March, 1884, copies of which Resolutions are set forth at the foot of this notice.

The Transfer Books will be closed on the afternoon of Saturday, the 5th day of April, and reopened on the day succeeding the meeting.

By Order, W. M. BOWNE, Secretary.

Dated the 25th day of March, 1884.

RESOLUTIONS

I.—That each of the existing shares of £30 each be subdivided into three shares of £10 each, and that the conditions contained in the Memorandum of Association be modified accordingly. Provided that in such subdivision the proportion between the amount which is paid and the amount which is unpaid on each share of £10 each, shall be the same as in the case of the existing share of £30 from which it is derived, and consequently that each existing share of £30, having £29 12s. 6d. paid up thereon, shall be represented by three shares of £10 each, having £29 17s. 6d. per share paid up thereon, and so in like proportion in cases where any greater or less amount than £29 12s. 6d. is paid up on any existing share.

II.—That the directors may issue and dispose of three shares of £10 each, having £7 7s. 6d. per share paid up thereon, in lieu of each or any of the £30 shares remaining to be issued and disposed of as a share having £28 2s. 6d. paid up thereon, under Articles 2 and 3 of the company's Articles of Association, and may pay or appropriate out of the profits of the company a sum of 2½d. in respect of each three shares so issued or disposed of to make up the amount of £28 2s. 6d. by the said Articles provided to be credited as paid up thereon.

III.—That, notwithstanding anything in Clause 7 of the company's Articles of Association, the directors may of their own authority make a call or calls to the extent, on the whole, of 10s. per share on each or any of the shares now authorised to be issued as having £9 7s. 6d. each paid up thereon, so as to bring the same to an equality with the other subdivided shares of £10 each in the company, and such call or calls shall be payable at the times and places appointed by the directors, in the same manner and with the same consequences as to interest and powers of sale in default of payment as if made by the company under the said Clause 7, which clause (save as hereby modified as aforesaid) shall remain in full force.

THE LINARES LEAD MINING COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office on THURSDAY, the 3rd April next, at One o'clock p.m.:-

To receive the accounts, balance-sheet, and reports of the directors, auditors, superintendents, and mining agents for the half-year ending 31st December, 1883.

To elect two directors in the place of William Cox and H. D. Abercrombie, Esqs., who go out of office by rotation. They are both eligible, and offer themselves for re-election.

To appoint two auditors for the ensuing year. Edward L. Agar and Richard Donagan, Esqs., who are eligible, offer themselves for re-election.

And for general business, as authorised by the Deed of Settlement.

By order of the Board,

H. SWAFFIELD, Secretary.

No. 5, Queen-street-place, London, E.C., 26th March, 1884.

THE FORTUNA COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 3rd April next, at half-past One o'clock p.m.:-

To receive the accounts, balance-sheet, and reports of the directors, auditors, superintendents, and mining agents, for the half-year ending 31st December, 1883.

To elect two directors in the place of William Cox and H. D. Abercrombie, Esqs., who go out of office by rotation. They are both eligible, and offer themselves for re-election.

To appoint two auditors for the ensuing year. E. J. St. John and Richard Donagan, Esqs., who are eligible, offer themselves for re-election.

And for general business, as authorised by the Deed of Settlement.

By order of the Board,

H. SWAFFIELD, Secretary.

No. 5, Queen-street-place, London, E.C., 26th March, 1884.

THE ALAMILLO COMPANY (LIMITED).

Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of this company will be HELD at this office, on THURSDAY, the 3rd April next, at Two o'clock p.m.:-

NOBEL'S DYNAMITE



Manufactured and sold by
NOBEL'S EXPLOSIVES COMPANY, LIMITED
(FORMERLY THE BRITISH DYNAMITE COMPANY LIMITED),

Head Office: 149, West George Street, Glasgow.

EXPORT AGENTS: JAMES THORNE AND CO., 85, GRACECHURCH STREET, LONDON, E.C.

FACTORIES—ARDEER WORKS, STEVENSTON, Ayrshire.

WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.

REDDING MOOR WORKS, POLMONT STATION, STIRLINGSHIRE.

TONITE, OR COTTON POWDER,

IS RECOMMENDED TO CONTRACTORS, MINERS, PIT SINKERS, QUARRYMEN, AND OTHERS, AS BEING THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES

TONITE is the most efficient and economical blasting agent ever invented, and is largely in demand. It does not contain any Nitro-glycerine, and is, therefore, exempt from the dangers of exudation, or of freezing and its attendant process of thawing.

The Company manufacture

PATENT DETONATORS

quality much superior to the foreign article. Also supply Safety Fuse and Electric Firing Appliances of best description. The trade supplied on favourable terms.

ADDRESS—THE COTTON POWDER COMPANY (LIMITED)

23, QUEEN ANNE'S GATE, LONDON, S.W.

WORKS: FAVERSHAM, KENT.

Agents: DINEEN and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B. W. HARRISON, Barrow-in-Furness; W. J. PARRY, Bangor; HUNTER and FOTHERINGHAM, Glasgow.

RHENISH DYNAMITE COMPANY.



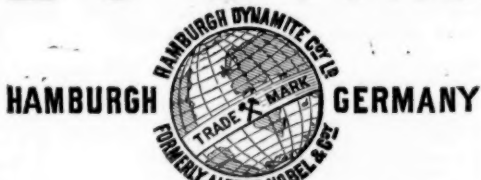
OF THE GREATEST STRENGTH ALLOWED BY THE EXPLOSIVES ACT.

OFFICES:—

1, Coleman Street Buildings, Moorgate Street, London, E.C.

LONDON AGENT,—E. KRAFTMEIER & CO., 5, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C

NOBEL'S DYNAMITE.



MANUFACTURED AND SOLD BY THE

DYNAMIT-ACTIEN-GESELLSCHAFT

VORMALS ALFRED NOBEL & CO., HAMBURG.

(HAMBURG DYNAMITE COMPANY, LIMITED),

Formerly ALFRED NOBEL & CO.

LONDON OFFICE: 42, BASINGHALL STREET, E.C.

BEST PRICES AND TERMS ON APPLICATION.

BRAUN AND BLOEM'S

CELEBRATED

DETONATORS—"EAGLE" BRAND.

TRADE



MARK.

No implements required for opening inner tin box, thereby avoiding any danger arising from opening same with tools, as generally used.

Sold by WM. BRODERSEN, 79, Leadenhall-street, London, E.C.

SOLE AGENT FOR THE UNITED KINGDOM AND THE COLONIES.

For Excellence
and Practical Success
of Engines.



Represented by
Model exhibited by
this Firm.

HARVEY AND CO.

(LIMITED),

ENGINEERS AND GENERAL MERCHANTS,
HAYLE, CORNWALL.

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF

PUMPING and other LAND ENGINES and MARINE STEAM ENGINE
of the largest and most approved kinds in use, SUGAR MACHINERY,
MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

MANUFACTURERS OF

HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,

IN GOOD CONDITION, AT MODERATE PRICES—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES,
STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of
various sizes and descriptions; and all kinds of MATERIALS required for
MINING PURPOSES.



PACIFIC IRON WORKS

RANKIN, BRAYTON, AND CO.,

For Copper and Argentiferous Galena Ores.

GENERAL OFFICE AND WORKS,

San Francisco, Cal., U.S.A.

BRANCH WORKS,—CHICAGO, ILLINOIS, U.S.A.

The Pacific Water Jacket Smelters embrace many features that
are entirely new and of great practical utility, which are secured
by letters patent.

No other furnaces can compare with these for durability, and in
capacity for continuous and interrupted work.

More than One Hundred

of them are now running in the various mining districts of the
United States, giving results never before obtained as regards con-
tinuous running, economy of fuel grade and quality of bullion
produced.

These Smelters are shipped in a complete state, requiring no
brick or stone work, thus saving great expense and loss of time in
construction.

Complete smelting plants made to order, with all the improve-
ments that experience has proved valuable in this class of machinery.
Skilled and experienced smelters furnished when desired to examine
mines and to superintend constructing and running of furnaces
Estimates given upon application. Send for circular.

We refer to A. S. CHURCH, Esq., 118, LEADENHALL STREET,
E.C., LONDON.

THE
BEST METAL FOR BUSHES,
BEARINGS,
SLIDE VALVES,

And other wearing parts of Machinery.

PUMPS, PLUNGERS,
CYLINDERS, &c.

PHOSPHOR BRONZE
WIRE, TUBES
SHEET, RODS
TOOLS &c.

STEAM
FITTINGS

SOLE

MANUFACTURER

UNDER PATENTS.

THE

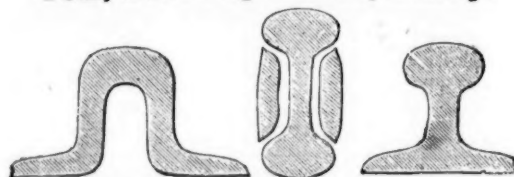
PHOSPHOR BRONZE

COMPANY, LIMITED,

SUMNER STREET, SOUTHWARK
LONDON, S.E.

JOHN BEATSON & SON.

40h, St. Mary's Gate, Derby.



IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per
yard, new perfect, new slightly defective, or second-hand, with Fish-plates,
Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when re-
quired.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.

BARS, PLATES, SHEETS, &c.

STEEL OF ALL KINDS. PIG IRON OF ALL KINDS

Delivered at all Railway Stations and Ports in Great Britain.

WILLIAM BENNETTS,

PATENT MINERS'

SAFETY FUSE

MANUFACTURER.



This manufacture embraces all the latest improvements for use in
Blasting in Mines, Quarries, or for Submarine Purposes; and is
adapted for exploding Gunpowder, Dynamite, or any other Ex-
plosive; and is made suitable for exportation to any part of the world.
Price Lists and Sample Cards on application.

All communications to be addressed—

ROSKEAR FUSE WORKS,
CAMBORNE CORNWALL.

CALIFORNIAN AND EUROPEAN AGENCY,
509, MONTGOMERY STREET, SAN FRANCISCO CAL.

J. JACKSON, Manager.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pt.
2800 Blue Hills, t, St. Agnes	4 1/2	8	3/4	3/4	0 4	0 3
3000 Carr Brea, t, t, Illogan	12 12 1/2	11	3/4	2 3/4	0 3	0 10
5000 Craigant Burn, t, t, Cardigan	5 0	0	—	—	0 3	0 5
10000 Devon Gr. Consols, t, t, Tavistock	1 0	0	3/4	3	3 1/2	118 7
4000 Dolcoath, t, t, Camborne	10 14 10	69	—	70	36 18	0 10
8000 East Pool, t, t, Illogan	0 9	39	—	41	38 17	0 10
18000 Great Holway, t, t, Flintshire	5 0	0	—	—	0 12	0 7
15000 Great Laxey, t, t, Isle of Man	4 0	0	10 1/2	10	11	19 18
8000 Green Hurth, t, t, Durham	0 6	0	6 1/2	—	0 8	0 5
8000 Gurnea, t, t, Cardigan	2 0	0	—	—	0 19	0 2
10000 Isle of Man, t, t, Isle of Man	25 0	0	—	—	83 5	0 10
8000 Killarney, t, t, Chacewater	4 0	0	3 1/2	3 1/2	0 14	0 2
30000 Leadhills, t, t, Lanarkshire	0 0	0	2 1/2	2 1/2	1 5	0 6
400 Leadhills, t, t, Cardigan	18 15	0	—	—	615 0	0 10
10000 Mellanor, t, t, Hayle	3 0	0	1 1/2	1 1/2	2 4	0 3
3000 Miners Mining Co., t, t, Wrexham	5 0	0	8 1/2	5 8	69 11	0 2
30000 Mining Co. of Ireland, t, t, t, t	7 0	0	—	—	24 0	0 2
11000 North Hendre, t, t, Wales	2 10	0	—	—	118 0	0 4
1146 Ditto	1 5	0	—	—	0 11	0 3
2000 North Levant, t, t, St. Just	13 0	0	—	—	4 16	0 2
4700 Penhalls, t, t, St. Agnes	4 5	0	3 1/2	3 1/2	3 17	0 1
12000 Phoenix United, t, t, t, t, t, t	6 2	0	1 1/2	1 1/2	17 7	0 1
12000 Roman Gravel, t, t, Salop	7 10	0	5 1/2	4 1/2	9 11	0 5
8123 South Condurrow, t, t, Camborne	7 5	0	—	—	10 15	0 10
8000 South Darren, t, t, t, t, t, t	1 15	0	—	—	2 4	0 1
8000 Tincroft, t, t, t, t, t, t, t	13 12	0	3 1/2	3 1/2	51 3	0 5
15000 Van, t, t, t, t, t, t, t	4 5	0	3 1/2	3 1/2	25 13	0 2
15000 West Holway, t, t, t, t, t, t	1 0	0	1 1/2	1 1/2	3 1	0 1
8000 West Basset, t, t, t, t, t, t	7 30	0	2 1/2	2 1/2	28 3	0 8
8000 West Kitt, t, t, t, t, t, t	0 12	0	13	12 1/2	2 9	0 10
12000 Wheel Crober, t, t, t, t, t, t	2 4	0	1 1/2	1 1/2	1 3	0 2
1024 Wheel Eliza Consols, t, t, t, t, t	18 0	0	—	—	59 0	0 1
8000 Wheel Grenville, t, t, t, t, t, t	12 0	0	5 1/2	5 1/2	17 8	0 2
3000 Wheel Pevor, t, t, t, t, t, t	12 1	0	1 1/2	1 1/2	11 13	0 4

FOREIGN DIVIDEND MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pt.
35000 Alamosa, t, t, Spain	2 0	0	1 1/2	1 1/2	2 15	0 2
130000 Almaden and Tinto Consol., t, t	1 0	0	3 1/2	3 1/2	6 3	0 1
20000 Australian, t, t, South Australia	7 7	0	3 1/2	3 1/2	1 9	0 2
15000 Birdseye Creek, t, t, California	4 0	0	1 1/2	1 1/2	1 5	0 1
30000 Bratsberg, t, t, Norway	2 0	0	1 1/2	1 1/2	2 0	0 1
150000 California, t, t, t, t, t, t	2 0	0	1 1/2	1 1/2	2 0	0 1
30000 Cape Copper Mining, t, t, t, t, t	8 0	0	4 1/2	4 1/2	56 7	0 1
40000 Colorado United, t, t, Colorado	10 0	0	2 1/2	2 1/2	0 14	0 1
80000 Copiapo, t, t, Chile (24 shares)	3 10	0	3 1/2	3 1/2	2 14	0 3
70000 English & Australian, t, t, t, t, t	2 10	0	—	—	3 2	0 3
30000 Eng. Aus., t, t, t, t, t, t, t	1 0	0	—	—	3 8	0 3
25000 Frontino, t, t, Spain	2 0	0	3 1/2	3 1/2	8 11	0 3
70000 Frontino & Bolivia, t, t, t, t, t	2 0	0	1 1/2	1 1/2	0 12	0 1
270000 Henriett, t, t, t, t, t, t, t	2 0	0	3 1/2	3 1/2	0 12	0 1
300000 La Plata Consols, t, t, t, t, t	2 0	0	3 1/2	3 1/2	10 10	0 4
50000 Linares, t, t, Spain	3 0	0	3 1/2	3 1/2	10 10	0 4
20000 Marbella Iron Ore, t, t, Spain	10 0	0	4 1/2	4 1/2	0 10	0 10
18514 Mason & Barry, t, t, Portugal	10 0	0	11 1/2	11 1/2	0 0	0 10
80000 Quebrada, t, t, t, t, t, t, t	10 0	0	5 1/2	5 1/2	1 15	0 3
50000 Panulillo, t, t, Chile	4 0	0	5 1/2	5 1/2	1 15	0 3
25000 Pitaguit, t, t, Brazil (100000 sh.)	0 10	0	—	—	30 3	0 1
14000 Port Phillip, t, t, t, t, t, t, t	20 0	0	8 1/2	8 1/2	14 2	0 10
1000000 Port Phillip, t, t, t, t, t, t, t	1 0	0	3 1/2	3 1/2	1 14	0 2
50000 Rara Fortuna, t, t, t, t, t, t, t	1 0	0	—	—	0 3	0 1
80000 Richmond Consol., t, t, Nevada	6 0	0	4 1/2	4 1/2	14 16	0 5
24532 Rio Tinto, t, t, t, t, t, t, t	100 0	0	100	100	0 0	0 10
350000 Ditto, shares	10 0	0	19 1/2	19 1/2	2 18	0 10
40000 Santa Barbara, t, t, Brazil	0 10	0	—	—	0 12	0 1
120000 Schwab Gully, t, t, Kimberley	10 0	0	8 1/2	8 1/2	15 15	0 1
120000 Scottish-Australian Mining Co., t, t	0 10	0	2 1/2	2 1/2	15 15	0 1
80000 Ditto, t, t, t, t, t, t, t	0 10	0	1 1/2	1 1/2	15 15	0 1
25000 Sierra Buttes, t, t, California	2 0	0	1 1/2	1 1/2	2 0	0 1
40000 St. John del Rey, t, t, t, t, t, t, t	2 0	0	1 1/2	1 1/2	3 0	0 2
250000 Tambora, t, t, t, t, t, t, t	1 0	0	—	—	0 6	0 1
160000 Tharsis, t, t, t, t, t, t, t	2 0	0	8 1/2	8 1/2	18 18	0 11
80000 Tolima, t, t, t, t, t, t, t	5 0	0	8 1/2	8 1/2	10 10	0 1
35000 Victoria, t, t, t, t, t, t, t	1 0	0	—	—	0 12	0 1
100000 Victoria, t, t, t, t, t, t, t	1 0	0	—	—	0 2	0 1
15000 Western Andes, t, t, t, t, t, t	5 0	0	5 1/2	5 1/2	4 5	0 2
2100 W. Prussian, t, t, t, t, t, t, t	10 0	0	7 1/2	7 1/2	0 0	0 8
64000 Yorks Pen., t, t, t, t, t, t, t	1 0	0	3 1/2	3 1/2	0 3	0 1

Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pt.
25000 Aberduna, t, t, Denbigh	1 10	0	1 1/2	1 1/2	1 10	0 1 1/2
12000 Anderton, t, t, t, t, t, t, t	1 2	0	—	—	1 2	0 0
12000 Asbestos, t, t, t, t, t, t, t	5 0	0	—	—	5 0	0 0
12000 Bedford Unit, t, t, t, t, t, t, t	0 14	0	1 1/2	1 1/2	1 14	0 1 1/2
30000 Bodidris, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 0
10000 Brada, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 0
30000 British, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 0
20000 British Manganese Company	1 0	0	—	—	1 0	0 0
30000 Buena Consols, t, t, Flintshire	1 0	0	1	2	2	2
20000 Bwch United, t, t, Cardigan	1 0	0	3/4	—	—	—
12000 Collacombe Consols, t, t, Lamerton	0 2	0	—	—	0 2	0 0
50000 Carn Camborne, t, t, t, t, t, t, t	2 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
37500 Carn Camborne Cons., t, t, Llanrwst.	2 0	0	1	—	—	—
6400 Cathedral, t, t, t, t, t, t, t	2 19	0	1 1/2	1 1/2	1 1/2	0 1 1/2
20000 Central Fockdale, t, t, t, t, t, t, t	1 17	0	—	—	1 17	0 0
25000 Coal-y-Fedw & Pant-y-Buarth, t, t	1 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
2450 Cook's Kitchen, t, t, t, t, t, t, t	33 14	0	9 11	10 11	10 11	0 1 1/2
30000 Creigiau, t, t, t, t, Denbighshire	0 17	0	—	—	0 17	0 1 1/2
6400 Crook Burn, t, t, t, t, t, t, t	0 17	0	—	—	0 17	0 0
4723 D'Eresby Mountain, t, t, t, t, Llanrwst.	0 10	0	—	—	0 10	0 0
12000 Derwent, t, t, Durham	4 0	0	—	—	4 0	0 0
8000 Devon Friendship, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
12000 Devon Great United, t, t, t, t, t, t, t	1 17	0	—	—	1 17	0 1 1/2
50000 Drakeville, t, t, t, t, t, t, t	0 15	0	—	—	0 15	0 1 1/2
50000 Duchy Peru, t, t, t, t, t, t, t	1 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
12000 East Blue Hills, t, t, St. Agnes	0 5	0	—	—	0 5	0 1 1/2
8000 East Botallack, t, t, St. Just	1 3	0	—	—	1 3	0 1 1/2
6144 East Caradon, t, t, St. Cleer	4 19	0	—	—	4 19	0 1 1/2
4000 East Chiverton, t, t, t, t, t, t, t	10 17	0	—	—	10 17	0 1 1/2
30000 E. Craven Moor, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
15000 East Devon Cons., t, t, t, t, t, t, t	2 0	0	—	—	2 0	0 1 1/2
20000 East Long Rake, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
25500 East Roman Gravel, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
18000 East Van, t, t, t, t, t, t, t	5 0	0	—	—	5 0	0 1 1/2
2048 East Wheel Lovell, t, t, t, t, t, t, t	18 18	0	1 1/2	1 1/2	1 1/2	0 1 1/2
25000 Ector, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
12500 Frongoch, t, t, t, t, t, t, t	2 0	0	2 1/2	2 1/2	2 1/2	0 1 1/2
12000 Gawton, t, t, t, t, t, t, t	2 0	0	—	—	2 0	0 1 1/2
40000 Glasg. Car., t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
10000 Goddards, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
32000 Goginan, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
25000 Goodevere, t, t, t, t, t, t, t	1 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
8500 Gorsedd and Merilyn Cons., t, t, Flint.	2 10	0	3/4	3/4	3/4	0 1 1/2
25000 Great W. Shepherd, t, t, t, t, t, t, t	0 5	0	—	—	0 5	0 1 1/2
50000 Great W. Shepherd, t, t, t, t, t, t, t	0 5	0	3/4	3/4	3/4	0 1 1/2
20000 Grogwilion, t, t, t, t, t, t, t	2 0	0	—	—	2 0	0 1 1/2
10000 Gwyn-y-Mynydd, t, t, t, t, t, t, t	4 0	0	1	3/4	3/4	0 1 1/2
70000 Gwydyr Amal, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
8400 Hardshins, t, t, t, t, t, t, t	0 2	0	—	—	0 2	0 1 1/2
12000 Herodasfoot, t, t, t, t, t, t, t	1 6	0	3/4	3/4	3/4	0 1 1/2
10000 Herodasfoot, t, t, t, t, t, t, t	0 13	0	—	—	0 13	0 1 1/2
35000 Holway Consols, t, t, t, t, t, t, t	1 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
25000 Kit Hill Gt. Cons., t, t, t, t, t, t, t	1 2	0	—	—	1 2	0 1 1/2
15000 Lady Ann, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
25000 Langford, t, t, t, t, t, t, t	0 10	0	—	—	0 10	0 1 1/2
15000 Landegla, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
5120 Lovell, t, t, t, t, t, t, t	0 16	0	3/4	3/4	3/4	0 1 1/2
8000 Marke Valley, t, t, t, t, t, t, t	7 11	0	—	—	7 11	0 1 1/2
8000 Medlyn Moor, t, t, t, t, t, t, t	2 15	0	—	—	2 15	0 1 1/2
8000 Mons, t, t, t, t, t, t, t	5 0	0	—	—	5 0	0 1 1/2
20000 Mons Consols, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
15000 Monkstown, t, t, t, t, t, t, t	2 0	0	—	—	2 0	0 1 1/2
20000 Mostyn Consols, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
12000 Morfa Du, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
80000 Mounts Bay, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
8144 Mount Carbis, t, t, t, t, t, t, t	1 15	0	3/4	3/4	3/4	0 1 1/2
12000 New Caradon, t, t, t, t, t, t, t	9 13	0	—	—	9 13	0 1 1/2
8000 New Caradon, t, t, t, t, t, t, t	3 0	0	—	—	3 0	0 1 1/2
10000 New Dolcoath, t, t, t, t, t, t, t	3 0	0	—	—	3 0	0 1 1/2
8000 New Holmbush, t, t, t, t, t, t, t	3 0	0	—	—	3 0	0 1 1/2
8000 New Kitt, t, t, t, t, t, t, t	1 2	0	1 1/2	1 1/2	1 1/2	0 1 1/2
15000 New Redmoor, t, t, t, t, t, t, t	1 5	0	—	—	1 5	0 1 1/2
17500 New Terras, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
3500 New Tincroft, t, t, t, t, t, t, t	6 0	0	—	—	6 0	0 1 1/2
12000 New Trumpet, t, t, t, t, t, t, t	1 0	0	1 1/2	1 1/2	1 1/2	0 1 1/2
8000 New Van Consol., t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
20000 New West Caradon, t, t, t, t, t, t, t	0 6	0	2 1/2	2 1/2	2 1/2	0 1 1/2
3000 New Wheel Pevor, t, t, t, t, t, t, t	0 10	0	—	—	0 10	0 1 1/2
12000 North Blue Hills, t, t, St. Agnes	0 2	0	1/6	1/6	1/6	0 1 1/2
5328 North Busy, t, t, t, t, t, t, t	1 19	8	—	—	—	—
10000 N. D'Eresby Mount, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
50000 North Goginan, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
8000 North Herdud, t, t, t, t, t, t, t	1 0	0	—	—	1 0	0 1 1/2
5000 North Grogwilion, t, t, t, t, t, t, t	1 0	0	3/4	3/4	3/4	0 1 1/2
12000 North Herdudfoot, t, t, t, t, t, t, t	0 13	0	—	—	0 13	0 1 1/2